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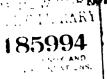
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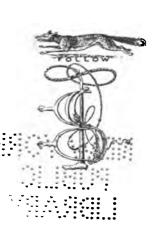
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#### THE

# Aabal and Military Magazine.

No. 7.

JANUARY 1st, 1885.

Vol. II.

#### OUR FRONTISPIECE.

## CAPTAIN GARNET WOLSELEY AT THE CAPTURE OF THE MOTEE MAHAL.



HE relief of the beleagured garrison of Lucknow by the little army under Sir Colin Campbell, was one of the most brilliant feats of British daring recorded during the Indian Mutiny of 1857.

The force which on the morning of November 14th of that year, started from its encampment on the plain around the Alum Bagh (the Garden of the World), upon this perilous mission, mustered scarcely 5,000 men of all arms, European and native. Between this body and the Residency in which were shut up the gallant Havelock with his band of followers "few but undismay'd," and many Englishwomen and little children, was an army of upwards of 50,000 regularly-trained native soldiers flushed with successes and wild with fanaticism. To force a passage through this host of enemies was the work which the old Highland chieftain told the soldiers, whom he led and loved, he had to ask them to do. Speaking to them with the curt brevity which is eloquence, when there is only time for deeds not words, he said, "The work is one of difficulty and danger, but it must be done. We must relieve our countrymen and countrywomen, and I rely upon you." The loud outburst of cheers which was the immediate response, showed that his reliance was well placed, and that the work of danger was gladly and gratefully accepted. How it was carried out-how that little band of heroes cut their desperate way through the beleaguring hosts-and brought relief to the weary garrison when hope had almost fled, is a story of which all Englishmen are proud, and which the "after times" will not willingly let die.

But it took days of hard fighting before the end was accomplished. The night of the 16th had closed over the bloody tragedy of the Secunder Bagh, where upwards of 2,000 of the rebels were killed by the 93rd Highlanders, the 4th Punjaub Rifles, and a detachment of the 53rd. On the morning of the 17th there was still hard work to be done. A building called the Khoorsheyd Munzil (the

Happy Palace), but better known as the "Mess House" had to be taken. After a heavy fire of three hours from Peel's guns, Sir Colin Campbell determined to carry it by storm. It was a formidable place; massive in its structure, surrounded by a ditch twelve feet broad and scarped with masonry, and beyond that a loop-holed mud wall. There were drawbridges, but it was not known whether they were down or not. Sir Colin gave the command of the storming column to Captain Garnet Wolseley, of the 90th, with instructions that in the event of the drawbridges being up and his not being able to effect an entrance, he was to leave his men under cover and return and report to him.

It was not the first storming column which Wolseley had led. Years before, he had had that honour in carrying the stronghold of the Burmese chief, Myat-toon, and had been severely wounded. He was more fortunate in his attack on the Mess House. The stormers had to run the gauntlet of a very heavy fire from the neighbouring buildings, but they entered the place with little opposition as the enemy had retired, leaving the drawbridge down. Calling upon his bugler to sound the "Advance," to intimate to Sir Colin his success, he ran up the steps of the building and planted the British flag upon the roof. But no sooner was the ensign displayed than the enemy opened fire from every gun which they could bring to bear, and twice was the flag struck down, but only to be replaced by Wolseley assisted—strange coincidence—by a young officer of the Bengal Artillery, Lieutenant Frederick Roberts!

But there was another building in the hands of the enemy, the Motee Mahal (the Pearl of Palaces), the last post which separated the besieged from their deliverers. Wolseley's task, as entrusted to him by Sir Colin Campbell, was accomplished by the taking of the Mess House. He had no instructions to do more. But there are moments in battle when opportunities are to be seized in spite of "instructions," and when what seems rashness in a commander, is really the genius which justifies daring. Garnet Wolseley was not a man to bid his stormers to retire under cover and "stand at ease," whilst he saw before him a prize which might be won by bold hearts with a dash. He made a rush at the Motee Mahal, followed with joyful alacrity by his gallant fellows. The way from

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the garden of the Mess House to the gateway of the Motee-Mahal was swept by the enemy's fire, but the gateway was reached. It was, however, built up and loop-holed, and through these loop-holes a murderous fire was poured upon the attacking party. Ready in resource and cool, Wolseley sent back an officer with some men to bring up crowbars and pickaxes to smash through the brickwork. This was done, but it was a hard fight to get the enemy's fire under, and the stormers lost many brave fellows. At length, however, an aperture was made in the wall, and through this, Wolseley and his men scrambled into the courtyard of the palace. Fighting hand to hand, they drove the enemy from room to room, and from yard to yard, towards the river on the banks of which the Motee-Mahal was built. Here the fugitives threw themselves into the water and sought escape in swimming across. "Kavanagh, of the Victoria Cross," Sir Colin's daring guide into Lucknow, was present during the whole of the attack, and wrote of its leader that "Captain Wolseley, who delighted in dash and danger, fell upon the enemy as they tried to escape, and in half-an-hour he was seen on the top of the inner buildings waving the British banner."

Wolseley had gained the Motee-Mahal, but he had not gained Sir Colin's goodwill. The old chief was furious

at an officer exceeding his instructions, and Wolseley was advised to keep out of his way until his ire cooled. But the erst leader of the stormers of Ciudad Rodrigo, was not likely to be long angry with a kindred spirit, whose disobedient daring must have recalled to him the memory of his own fiery courage, when youth and hope were his only fortune. He gave Captain Garnet Wolseley a "wigging" for presuming to take the Motee-Mahal without orders, and mentioned him in his despatches for the courage and ability he had displayed.

But, there is one little incident to be recorded, without which any story of the taking of the "Pearl of Palaces" would be incomplete. When the men were returning with the tools which Wolseley had sent for to batter down the gateway, Private Andrews, who had been his servant in the Crimea, ran from under shelter, to show his comrades the way across. He was immediately shot through the body from one of the loop-holes, and fell. Wolseley saw this and rushed to his assistance. Raising him up, he bore him back in his arms to a place of safety, under a shower of bullets, by one of which Andrews was again wounded.

The incident of the rescue of Andrews formed the subject of a painting by Mr. W. B. Wollen which was exhibited in the Royal Academy of 1881, and a copy of which forms the Frontispiece to our present number.

#### A NEW YEAR'S GREETING TO THE SOLDIER.



Years" passed in foreign lands, and on active service, and the great pleasure of receiving, on such occasions, a kindly message from friends at home, a Soldier Surgeon now ventures to send a kindly greeting and friendly wishes to his old

comrades wherever this New Year may find them, and however they may be employed.

Perhaps they will accept the greeting as kindly as it is offered, from one who in years gone by, was closely associated with them under every circumstance of service, and who, though he cannot serve them now, tried to do so faithfully and to the best of his ability for many a year. From one who served with them in almost every quarter of the globe-north, south, east and west-in rain and sunshine, storm and calm, cold and heat; marched with them many a weary mile; shared their bivouac in different lands; suffered with them from exposure, starvation, and disease in the Crimea, and served with them throughout the Indian Mutiny. From one who was present with them in the storm and strife of war, attended to their wounds upon the field of battle, nursed them in sickness, watched over them, thought of them, and laboured for them during the deadly pestilence, when no man knew the moment that he himself might be a victim, and who stood beside their cot to hear their last words, and watch them as they breathed forth their last sigh.

He feels that he has a right to send that greeting to them, whether their lot may be cast in the frozen north or torrid south, in the peaceful cantonment of distant India, or on the banks of the far-famed Nile; and to tell them that he remembers their virtues, and never fails to speak and write of them in words of praise, as he has been through life and a long service, a witness of their courage and endurance, of their faithfulness and generosity.

Perhaps he has a further right to send this greeting, being one of a race which has bred soldiers for near 800 years; a race whose sons have fallen in every battle fought between the Scotch and English, in the olden times when they were constant foes—at Bannockburn, on Flodden Field, and on dark Culloden Moor; on the continent of Europe, in America, and in India.

But now that his active career is over, and his eyes look "toward the sunset" of life, he can serve his old comrades no longer; but he can at least think of them, and appreciate their gallant deeds, and wish them God-speed and a Happy New Year, expressing at the same time a fervent hope that the Great Father, and the true Leader, Friend, and Comrade, will be with them always, and help them to do their duty as faithfully and well in the present and in the future, as in the past.

"A soldier-surgeon."

WM. MUNRO,
Surgeon-General.

#### ALL'S FAIR IN LOVE AND WAR.

BY LIEUT.-COLONEL A. L'ESTRANGE.

#### CHAPTER I.

SKIRMISHING.



OT long ago—it matters little when—and in a Militia camp—it matters little where—the fun was fast and furious. It is difficult to say how the officers managed to put in three parades a day and yet find time for a constant round of amusements and festivities. The

Cucumberland and East Wessex Regiments of Militia were under canvas on Bennington Heath for the annual period of twenty-seven days' training, and both showed a goodly muster of officers and men. Since the 1st July, 1881, you will search the Army List in vain to find either regiment in it. They have wholly disappeared, owing to the exigencies of Mr. Childers's Territorial Scheme, and now are known as the 3rd and 4th battalions of the South-East Sheffield Regiment. Neither corps ever had the slightest connection or association with the town of Sheffield, which is chiefly famed for its cutlery. The proposed solution of an inexplicable union, that the regiments in question contained many sharp and knowing blades, is too wild to be satisfactorily adopted in these days of captious criticism.

Not only had these corps no earthly connection with Sheffield, but they had positively none with one another. Geographically, their counties lay on the opposite slopes of the same water-shed, and neither agriculturally nor commercially, was there any intercourse between them. The first-named regiment bore the title of the Cucumberland Rifle Regiment of Militia; the second was named the Royal East Wessex Light Infantry. Now, had a War Office clerk been asked to pick out from the whole Militia service the two corps that ought not to have been amalgamated, perforce he must have selected the above. Even when their linking was effected, the joke of the thing was not seen in its entirety, until, robbed of their good names, the regiments were forcibly billeted on the townspeople of Sheffield, who did not know and did not want them. Then the humour of the whole arrangement was complete, and officers and men said: "It is Childers's doing, and lo! it is wondrous in our eyes!"

The Goodwood week was over when the training of these regiments began. It was the month of August. The London season ended, Parliament was practically done with. A few Members were kept in town to make a House and pass the Indian Budget—a trifling annual bill affecting some 300,000,000 of subjects belonging to Kaisar-i-Hind; which account yearly awakens no more

interest in the faithful Commons, than an invoice for the repairs of a garden pump. The country around Bennington was filled with the disjecta membra of Society escaped from the exacting requirements of fashion. They had done their three months' hard labour in the Row, at garden parties, lawn-tennis, balls, operas and concerts, and with a wild shriek of liberty, were now at their country-seats, preparatory to breaking off to moor or loch to enjoy their justly earned holiday.

There was scope for flirtation at Bennington camp, and time was found for it. Barchester, only four miles off, is, as all the late Anthony Trollope's readers know, a cathedral town. It furnished a goodly contingent of young ladies available for lawn-tennis and afternoon dances, which latter were given twice a week in camp. Spankler's world-renowned circus was performing at the time in Barchester and the South-East Sheffield Regiment hired from the manager a tent of large dimensions which was pitched outside the camp. This canvas temple was during the month, consecrated to Terpsichore, and there the rites of the goddess were performed. In plain words, dancing took place therein.

"You'll see a thorough-bred filly here this afternoon, and in perfect training," said Dick Dollinger; "she can give a couple of stun to these Barchester bred 'uns and win easily, hands down, in a canter. Egad! she'll be first favourite, and the others-won't be in it."

Dick Dollinger was a lieutenant in the North Wessex Yeomanry Cavalry, and no one better known in the county. A thorough sportsman, he held his own at all exercises where pluck and muscle came into play. While hunting, shooting, and fishing were all in his line in the field. In the salon he was equally au fait of music, dancing, theatrical entertainments, and other social gaieties. Dollinger dearly loved practical jokes, and played off many. Somehow, he seemed to have been indemnified by the Fates from their consequences. What might have evoked retaliation from any other quarter, was passed over coming from him. The victim generally laughed first, and one and all said,

"Hang it! It's Dolly again—the little rascal at his old games!"

The filly alluded to by Dick Dollinger had only two legs. Metaphorically he spoke of a female, a visitor at a country-house in the neighbourhood, and as he used horsey terms and the flowery language of the turf, he conveyed to his hearers outside the mess-marquee, that a young lady of great personal attractions was about to visit the camp, who would eclipse all the pretty girls of Barchester and depose the thitherto reigning belle.

Mark Twain, in his story of the Jumping Frog, tells us that the owner of that considerably overweighted and unfairly handicapped animal, had a propensity to make bets on everything. Dick Dollinger had the same mania, and in a general way, was always ready to take odds against events that, humanly speaking, might be set down as certainties. An anecdote—a true one—will illustrate his bent.

In company with the Archdeacon of Barchester one day, the conversation turned on a local murder, and Dick Dollinger, in describing the assassin, probably to air his Biblical lore before the great divine, called him "the Barabbas of Barchester."

"Now Barabbas was a robber," quoted the Archdeacon in correction.

"I'll take you ten to one he wasn't," replied Dolly; but whether it came within "archidiaconal functions" to accept the bet deponent sayeth not.

"Egad!" said Dollinger, "we must get up a match and run the two Chiefs for the Filly Sapling Stakes. The two colonels are jealous of each other, and if we can only get 'em both to fall in love with my nomination (and I'll take odds on the double event coming off), the thing is done and the fun begins."

Dollinger, more than welcome in the camps, was an honorary mem-

ber of both messes. He acted as galloper to the colonel of the Onety-Oneth Regimental District, who came down to the Bennington Camp as brigadier. Dolly, as he was popularly called, was prime organiser of pigeonshooting matches, and one of the stewards of the athletic sports and amusements in the camp. He was handicapper of the foot-races, and acted as judge or starter. At the high jump he beat the champions of the two regiments, and came in first in a sack race. Of course he was immensely popular with the men, and equally so with the members of Mr. Spankler's troupe. He was on the best terms with the fair equestrienne who figured in the bills as Mademoiselle Penthesilea Petitspieds (her real name was Ann Jones), the Bounding Amazon of the Scamander, and he not only at a circus rehearsal, took part in a ride, and jumped from horseback through the hoops, but got up for

Spankler's delectation a grand performance of the Courier of St. Petersburg, and showed him how to do it. The feat consists in driving four horses by turns four and two abreast and in rank entire, and jumping from one to another ad libitum—an arrangement which must considerably jeopardise the punctual delivery of the mails in Russia.

Mrs. Trevanyon-Smythe had given hostages to Fortune, and was the proud possessor of three very pretty daughters. A widow with a fair competence, as a designing mother she saw her way to obtain the full marketable value of her daughters' charms. So far, she had been successful in marrying her eldest girl to Viscount Nine Elms, son of the Earl of Vauxhall, and as this veracious history opens, she is on a visit to her brother, Sir Jacknaps Heavyman

DICK DOLLINGER.

(M.P. for Barchester) of Heavynaps Hall. Like a skilful commander determined to succeed, Mrs. Trevanyon-Smythe has organised an Intelligence Department with an elaborate mastery of details. She has thoroughly studied the map of the county, knows whence to obtain her supplies, and how to requisition and quarter on the enemy. She has carefully-prepared returns of all festivities about to come off in the neighbourhood, and knows at lawn-tennis, county balls, cricket matches, race-meetings, and other rural gatherings, pretty well all

eligible partis—elder sons or heirs-presumptive—likely to attend them. Debrett and Burke she has at her fingers' ends, and the Army List, from Life Guards to Auxiliary Forces, is an open book carefully ticked off by her with the men who can afford to marry, while she estimates their means with the special knowledge of an Income-tax Commissioner.

It happened strangely, that Nemesis was in a conspiracy with Dolly Dollinger and Mrs. Trevanyon-Smythe to wed her daughter to one or other of the Militia colonels in Beddington Camp. Dolly was anxious for the event to come off, as he saw his way to make a book. Mrs. Trevanyon-Smythe wished it for those obvious reasons that readily occur to match-making mammas, while Nemesis was interested as a female ought to be; for though a goddess, she thought a wedding the most interesting

ceremony in the catalogue of Olympian amusements, and the glimpse of a trousseau more gratifying than the sight of the crown worn by almighty Jove himself. Let not pseudo-classical critics here interpose that Hymen is the god of nuptials, and that all weddings are made with his celestial sanction. Hymen was simply the registrar of marriages, and not interested in them beyond his fees, which he carefully collected with the keenness of any Government official in Pall Mall.

#### CHAPTER II.

#### THE ATTACK.

MRS. TREVANYON-SMYTHE and her daughter Constance sauntered in the garden of Heavynaps after breakfast, when the former remarked that the *soirée dansante* of the South-East Sheffield Regiment promised to be largely attended; so they immediately went into committee as to what each should wear on the occasion, which done, Mrs. Trevanyon-Smythe imparted some good advice.

"Many good people no doubt will be there, but the society is bound to be very mixed. Avoid curates from Barchester. They are a drug in the matrimonial market. The dean, archdeacon, and canons I see are all married. Of course you will not waste time with them. The Hon. Boyd Cliftonville will be there. He is heir to a title and nothing else, for his father, Lord Kemptown, is a pauper. The colonels of both regiments are eligible men,—one is eldest son of a baronet happily ninety-five years of age, the other is heir-presumptive to his uncle, the Earl of Cucumberland."

"Which is it to be?" asked Constance archly. "I can't well marry both."

"Not at once, my dear. Possibly in succession. The first might leave you a widow."

"In which case 'the double event,' as Dolly calls it, might come off." .

"Precisely: on the principle on revient toujours à ses premières amours."

Colonel St. Quintin of the Wessex, and Colonel Edgeumbe of the Cucumberland, had nothing in common save that each was at the head of a Militia corps. Neither had been in the regular service, but both had been embodied in 1854 and again during the Indian Mutiny, and quartered at Aldershot, the Curragh, Portsmouth, Plymouth, Dublin, and elsewhere. They had passed the School of Instruction; had been Instructors of Musketry to their regiments, and each had T. (T) against his name. Efficient as it is possible for Militia officers to be, they had fine regiments of broadshouldered men, drawn chiefly from the agricultural element of their counties, and the rank and file of the 3rd and 4th South-East Sheffield compared favourably with the boy soldiers of the 1st and 2nd battalions, whose measurements were, in our old friend Mr. Punch's language, slightly

altered, "Twice round the chest once round an earwig." The emulation between these Militia battalions was not confined to superiority in drill, discipline, steadiness, cleanliness, and good conduct, but extended to a healthy rivalry in all athletic contests, running, jumping, vaulting, putting the hammer, and many other varieties included in the bi-weekly programme of camp sports to which the officers contributed liberally. Parenthetically, the advantage may here be insisted upon not only of training every Militia regiment in camp, but of having each brigaded with one of another county—an arrangement which promotes emulation between officers and men, encourages csprit de corps, and leads to the establishment of camaraderie, a word for which there exists no English equivalent.

To revert to the colonels. Dolly Dollinger forcibly and epigrammatically summed up their characters when he said,

"One is a pig's-skin, the other a kid-glove man."

Dollinger was right. Colonel Edgcumbe in good truth was a lover of the pig's-skin and as much devoted to hunting as Dolly himself. Of the earth, earthy, and of the field, fieldy; as Horatius Flaccus says, "He, a lover of the country, bade St. Quintin, a lover of the town, Be well;" and seldom went to London save to make up arrears of new operas, popular plays, and the many other items in the whirligig of Vanity Fair that all in Society are bound to see. Colonel St. Quintin per contra, never "babbled a' green fields." He was an habitué of the green-rooms, and had the entrée to most theatres in London and Paris. A member of many clubs, he was essentially of the street, streety, and like the poet Morris, considered "the sweet shady side of Pall Mall" preferable to a thousand acres of brushwood and ploughed ground.

With every apology to the reader, more especially if the beaming eyes of lovely women deign to skim these pages, be it said that the title "All's Fair in Love and War" is somewhat of a misnomer. Of love there is little to The programme sets forth flirtation, courtship and a possible marriage; but as professional novelists say, "We must not anticipate." Truth be told, there are no elements for love—real, impulsive, demonstrative love, as portrayed, Eheu! fugaces labuntur anni! in old Adelphi melodramas. For what do we find? A really handsome girl tutored to look upon matrimony as a means to acquiring, not esteem, love, devotion and the sacrifice of all things mundane to the possession of an honest and genuine heart—but wealth, rank, power, influence and the many consolations that consols (hence so called) can afford.

Were this a three volume novel, the *dénoûment* should be kept carefully concealed. The heroine and her designing mamma should appear in the first volume. The second ought to contain the rivalry between the two colonels, while their fate trembles in the balance. Charles

Lever in his days, would have had a duel between these warriors, and a substitute in times present, might fitly take the form of an action with damages for breach of promise instituted by the jilted one. The last volume would have let down the curtain with a description of the wedding, and the bride's list of presents. In this historiette, there is no room for padding. Facts alone can be stated; for my friend the inflexible Editor will ruthlessly cut down redundancy and restrain metaphor, allegory, pleonasm and the exuberance of verbosity.

Here then is the situation in a nutshell. The two

colonels are after the same girl, not through love or affection, but simply through long existing rivalry. Constance cares for neither, save as a good investment in the matrimonial market. Both start on level terms, one to win. Socially, they are equal and their chances about the same. Which then do you back? At present in the betting neither has the call, so take, if you can get it, a shade of odds on either side.

The bi-weekly felcs champetres in camp presented many novel features. Spankler's large tent was common to both regiments, and they gave the entertainments alternately.

THE RIVAL COLONELS.

On Wednesdays there was five o'clock tea with light refreshments. A regimental band played, and lawn-tennis and flirtation heightened the attractions. On Saturdays, when afternoon parade was dispensed with, a stronger programme was provided. There was lunch at three o'clock, tea at five, and dancing commenced at six. The bandmaster of each regiment performed, one at the piano the other on the violin, while the cornet, flute, harp, sackbut, psaltery and all kinds of music, were supplied by members of the band. These free and easy soirées dansantes were in immense favour with all. The belles

of Barchester, somewhat jaded with the excitement of choral services and ritualistic high-feasts, thought that with the Bennington camp, the millennium was already within measurable distance, and like the Irishman who haply visited New York on July 4, and got treated to unlimited whisky, expressed the hope that "the anniversary would come every day of the year and stop a fortnight."

As Mr. Henry Irving when he comes on in *Hamlet* dwarfs the earlier efforts of Francisco, Bernardo, Horatio, Marcellus and the Ghost, so Constance Trevanyon-Smythe

on her appearance in the Bennington camp totally eclipsed the pretty girls of Barchester, who at once fell to the rear as do the ladies of the corps de ballet when the leading danseuse comes bounding before the footlights. Envy, hatred, malice and all uncharitableness, were freely expressed by the local graces when they saw a stranger more beautiful than themselves invading their domain. Female spite however soon abated, and was quickly reduced, as algebraists say, to its lowest terms, when it was found that the two commanding officers were rivals. This discovery cleared the

course and left majors, captains, and subalterns with expectations, open to the fascinations of the Barchester belles who promptly availed themselves of the opportunity offered.

"How goes on the campaign, Dolly?" asked Sir Jacknaps Heavyman, interested in the marriage of his niece. "Which side will win?"

"Whichever Miss Constance prefers. St. Quintin and Edgecombe, up to this, are making a waiting race of it; each afraid to force the pace, lest the other may come with one of Fred Archer's rushes and win on the post." The baronet, who himself was a sportsman, appreciated the simile and said:

"Well I want Edgecombe to win, for reasons partly political and all purely selfish. My sister is indifferent. So long as she lands one of them, she don't care which stable supplies the winner."

"Will you back Edgecombe against St. Quintin, Sir Jacknaps?" asked Dollinger eagerly.

"No, not with you Dolly—for then, you'd play some game and run the other in."

"Well the other way about? It will suit you to lay against him. I'll take you a monkey to a pony."

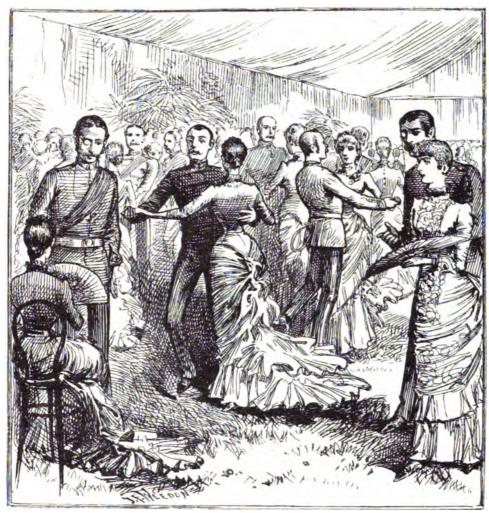
the honourable member for Barchester. "There'll be some fun any way, for I see he's bent on mischief."

"There may be the deuce of a row, but I'll land that £500" said Dollinger, as he mounted his cob and rode away from Heavynaps Hall to Barchester, where he had a long chat with Mr. Spankler, and made the clown fearfully jealous by flirting with the Bounding Amazon of the Scamander.

#### CHAPTER III.

#### DEFEAT.

MAJOR-GENERAL Fitz-Binks, commanding the London and North-Western Division, having signified his intention



THE MILITIA AFTERNOON DANCE.

"Done with you Dick!" replied the baronet. "As you say, it will suit me, and I can afford to lose £500 by the transaction. But mind! Dolly—none of your games and practical jokes this time. I trust to you, whatever you do, not to get my name mixed up in the transaction." Dolly promised to take all the responsibility upon himself, and Sir Jacknaps saw by the twinkle of his eye that he considered the money as good as won.

"What the devil is the little rascal up to now?" thought

of visiting Bennington camp, great preparations were made for his arrival. The general was assiduous in working up the auxiliary forces in his command, and took equal interest in the militia, yeomanry and volunteers. He had a happy knack of giving all every encouragement, while in plain language, he never hesitated to point out their faults.

"The general is coming on Friday, Dollinger. Can you mount him?"

"Certainly sir. Can he ride?"

"Well, of course he can ride," answered Colonel Twentyman, who commanded the Onety-Oneth Regimental District, "but get him, if you can, a quiet horse. Inspecting officers don't care to do the work of rough-riders, when on their tours of duty."

Dick Dollinger was invariably requisitioned to find mounts on occasions like the above. He had provided Colonel St. Quintin with a charger, which belonged to a trooper in his own regiment, a showy animal up to any weight and as quiet as a sheep.

"I must ask you sir," said Dollinger to Colonel Twentyman, on the evening preceding the inspection, to request Colonel St. Quintin to give up his mount to the general. I shall supply him with another. You can vouch for his present charger being all right."

"Certainly. He's a showy animal, and will suit him admirably. I'll ask St. Quintin to-night at mess."

The request of Colonel Twentyman came very much as an order, and of course Colonel St. Quintin was obliged to give up his horse. Dinner over, he sought Dollinger and anxiously inquired what he should do on the morrow.

"Oh! you'll be all right, colonel. I've a grand mount for you. Showy and handsome—black and white piebald. There'll be nothing like him on the ground. He'll make a sensation on parade."

"Is he quiet and accustomed to troops?"

"Quiet! he'll lie down if you ask him. You may fire a pistol on his nose and he won't flinch."

The assuring tone in which Dolly spoke restored confidence, and as Colonel St. Quintin implicitly trusted Dollinger in all matters of horseflesh, he said no more on the subject.

The occasion of Major-General Fitz-Binks's inspection was taken advantage of, to have an extra gala day in camp. The Barchester and Heavynaps troops of yeomanry cavalry kept the ground, assisted by some companies of local volunteers. The whole side of the county came up for the sight, and numerous carriages lined the ground to the right and left of the saluting base, making the gathering look like a race meeting. All the Barchester Church dignitaries, from the Bishop and Mrs. Proudie down to the mildest sucking curate, were present, and need it be said, that in a conspicuous place in the very front rank, was the Heavynaps carriage, containing Mrs. and Miss Constance Trevanyon-Smythe?

Colonel St. Quintin turned out brilliant in well-fitting uniform, and with boots so resplendent that one might have shaved in them in lieu of a mirror. The men had fallen in on their private parades when Dolly cantered up, accompanied by a trooper in yeomanry uniform riding the promised black and white.

"This is Magpie, sir—your mount. Perfectly quiet, but as he is new to infantry I suggest that my man exercise him about the camp until the brigade forms up."

"Thanks. By all means," said St. Quintin, and he

went to the senior major to give him orders to march off his battalion to the ground. The 3rd and 4th Sheffield consisted of ten strong companies each. The regiments were broken up into three battalions of six companies, numbered 3rd, 4th, and 5th, for the inspection. When all was ready the trooper reappeared with Magpie. The colonel mounted, "made much of him," and cantered off to join his corps.

"'Napoleon crossing the Alps,' by David, is a tame picture after that," said Dolly, as St. Quintin, on the Magpie, which curvetted with a redundance of showy action, passed the line of visitors, when the gallant colonel glanced at the Heavynaps carriage with a kill-and-conquer look. In a few minutes after he took his place with his regiment.

And now the ceremony of the day began. Colonel Twentyman was present attended by Dick Dollinger. The brigade in line of columns came to attention, fixed bayonets, and shouldered. Officers and colours took post in review order, when up rode FitzBinks, and was received with the usual salute. Magpie meanwhile behaved admirably. Neither fixing bayonets nor the colours flying had disconcerted him. When the band played at the "Present Arms!" she seemed pleased, and went through some harmless but showy motions (keeping time to the music), marking time not unlike Major Wellington de Boots in the Widow Hunt.

The general having rapidly ridden down the line, the order was given to march past in quarter columns. The battalions moved to the right in fours, wheeled to the left at the double (in fours), and on reaching the second point received the word "Front turn—shoulder arms!"

Colonel St. Quintin, commanding the third battalion, took up his position in front of the leading company, touched Magpie with his heels, and prepared to distinguish himself. Right well he looked so far—indeed, so much so, that Sir Jacknaps began to fear that he might win Dolly's pony after all.

The bugle-sergeant, facing inwards to his band, stepped back and called "Left, right, left, right," taking up the step, which was duly accentuated by Boom! boom! boom! boom!—four thuds on the big drum preparatory to the music striking up.

Ye gods! what a sight presented itself! Pen cannot describe what the pencil of Mr. Weedon portrays! At the first thump on the drum the Magpie halted; at the second he tucked his hind legs under him; at the third he sat down on his haunches; at the fourth he stuck out his near foreleg stiff and straight, faithfully combining in his pose plastique attitude the attributes of the setter and pointer!

The best rider in the world would have been helpiess in this wholly unexpected action, and Colonel St. Quintin's movements necessarily had to conform to those of his quadruped. On Magpie's first motion St. Quintin was thrown violently forward, receiving a blow on his face that

made his nose bleed. On the second he was thrown back, on the third he slipped down ignominiously, vid the tail; but his subsequent proceedings cannot be chronicled with accuracy, for up came the leading company with its right-centre section on the top of Magpie, who continued to sit motionless and

impassive.

"Chaos come again!" and "Confusion worse confounded!" fail to express the situation. The battalion being quarter column, No. 2 company quickly closed on the front, and added to the disorder. The right-half battalion was all over the ground with broken ranks before Colonel Twentyman perceived the hitch, and " The shouted, brigade will halt!" The laughter and cheers that rang out from the spectators seemed to please Magpie, who abated nothing of his impassiveness and rigidity. " Patience on a monument was not in it with

THE RESULT OF DICK DOLLINGER'S BET.

him," as Dollinger afterwards expressed it. Meanwhile General FitzBinks, livid with rage, rode down with his aide-de-camp on the luckless colonel, and discharged a salvo of expletives at his devoted head.

"Hang it, sir! Dash it, sir! Confound you, sir! What do you mean by your dashed tomfoolery? Get out of this,

sir! Where's the senior major? Here, sir! reform your battalion and bring back the band."

While these orders were being carried out, poor St. Quintin made good his retreat and was not seen afterwards. Magpie, however, was left sitting on the ground

until a little man darted from the crowd, went up to him and took him by the ear, when the piebald rose. He then vaulted into the saddle and rode off. It was his owner, Mr. Spankler of the circus.

Dollinger had arranged with the exhibitor of the Bounding Amazon of the Scamander supply Colonel St. Quintin with Magpie, whose idiosyncrasy in the ring was to sit down at the taps of a drum. Dolly knew that by turning St. Quintin into overwhelming ridicule he would vacate the position, and leave a walk over for his rival.

"There," said Dolly as he

pocketed the £500 from Sir Jacknaps Heavyman on the marriage of Colonel Edgecumbe to Constance Trevanyon-Smythe, "I landed that bet, thank heaven! It was rather rough on St. Quintin, but 'All's Fair in Love and War.'"



M. FERDINAND DE LESSEPS, PRESIDENT OF THE SUEZ CANAL COMPANY.

#### THE STORY OF DE LESSEPS AND THE SUEZ CANAL.

BY PERCY FITZGERALD, M.A., F.S.A.

#### PART I.

HOW THE CANAL WAS PLANNED.



HE construction of an immense canal nearly one hundred miles long would not, in these days of great works, appear to be so wonderful a task. But this enterprise of the famous Suez Canal was the work of a simple stranger in a foreign and

scarcely civilised country, without money or resources, opposed by powerful nations and Ministers, who had to find

workmen and machinery, and who was checked by difficulties of all kinds; yet the money laid out on his scheme reached the enormous sum of nearly twenty millions sterling! Will it not be interesting to follow him in his toilsome course, chequered by repulse, defeat, and success? Ferdinand de Lesseps, the brave Frenchman, showed the same qualities as Robinson Crusoe did, in the face, of course, of much greater difficulties; and I shall proceed to relate his history, which is as interesting as any to be found in the story-books.

Looking at the map of the world, we shall see at a glance how necessary this short cut was, and how provoking

it was that Nature had not made it so originally. The enormous continent of Africa will be noticed, which, sprawling out into the vast ocean that surrounds it, hangs like a huge shoulder of mutton—broad end uppermost—by a single shred. This "joint" is about 12,000 or 13,000 miles in circuit, and the little uniting "shred" is the Isthmus of Suez. To England this ridiculous obstruction was a most serious matter in reaching her great Indian Empire, and compelled all vessels laden with troops, stores, or merchandise to go round by the Cape. London and Bombay do not seem so far apart; yet one look at the map shows the long roundabout course that had to be taken in going from one port to the other. In the good old times, there were a number of splendid sailing-ships -Indiamen-which took from six to nine months to get to their destination. When railways and steamboats were established, passengers and their luggage, together with the mails, were taken by a much shorter way across France, to embark at Marseilles on a vessel which took them to the Suez Isthmus, which they again crossed in a railway carriage, when they once more got on board a packet and steamed away to Bombay. Even this shortened journey has lately been further lessened by going from London to the coast of Italy—to the port of Brindisi, where the voyage begins. Royal mails now go by this route, and it is a wonderful sight to see the enormous collection of boxes—for the letters are not packed in bags-carried in and out from train to boat, from boat to train, to Ostend or Calais, thence across France and Italy, and so on till they reach Bombay. It is amazing what labour, trouble, pressure, and cost of money is expended to transport these boxes swiftly, and how securely they are carried under supervision of mail agents by French, English, Italian, Egyptian, Lascar, and Eastern porters, until they reach their destination. A letter to India is a slight matter now, but in the old days of the East Indiamen it was like writing a small book, and when you could only write home once a year or so, a great deal had to be put into the letter. Among family papers will often be found these old "ship letters" as they were called, written in close writing on large sheets of foolscap, and often filling seven or eight or ten sheets.

The cutting through this shred of land had often been attempted, even in the times of the Pharaohs. Indeed, many inquirers have thought that the water once ran across, and that the seas on each side—the Mediterranean and Red—had once been joined here. There are traces of an old canal between the seas, not across the Isthmus, but following the Nile, and Herodotus describes having seen vessels sailing on it. The great Napoleon when in Egypt, was eager to have the plan carried out, and employed engineers to survey the country. But the successes of the English interrupted this and other schemes. The task was a stupendous one even to think of. It should

be a very different thing from those common canals we are accustomed to. This must carry vessels of enormous size—the shipping of the world—not mere barges, which are at most four or five feet deep in the water. Many of the great vessels draw twenty and thirty feet. Everything should be on the grandest scale, and yet, as we have said, one man was found to do the work!

De Lesseps came of a race of energetic men; and from the name it is probable he had a strain of Scotch vigour in his family. His grandfather made a name for himself as a daring traveller. The fate of La Pérouse, the French captain who set out to explore far-off seas and discover far-off lands, and who never returned, makes a pretty story which has often been related. De Lesseps's grandfather sailed with him, and by some strange accident or fate, was left behind at the furthest end of North-Western Asia, without money, supplies, or literally anything save the clothes he wore. Still in the most wonderful fashion, he contrived to make his way home through Siberia and the wildest parts of Russia. One day, after four years' absence, a stranger made his appearance at Versailles-at the Court of Louis XVI., dressed in the skins of a Russian peasant, and became what is called "a lion," on account of the marvellous trials and adventures he had experienced. His son Matthew was also clever as a diplomatist. His son, our hero, and the hero of the Great Canal, also made a name for himself in the consular line.

Ferdinand de Lesseps had long dreamed of this Suez scheme, without ever hoping to see it made. He had been in Egypt, and had made friends with Mohammed Said, one of the pashas, but he had no power and could do nothing. Ferdinand had been a little unlucky in his consular business, and had retired to a little property where he determined to farm and spend the rest of his days. He was about fifty, when the best portion of life had slipped away. But it is curious how in life, often the most unexpected changes and turns of good fortune have come when all hope has been given up.

One August morning, in the year 1854, he was standing on the roof of his house, directing some masons and thinking only of his farm, when the post arrived. The letters and newspapers were handed up to him by the workmen, and, casting his eyes over the newspaper, he read that the Viceroy of Egypt was dead and that the new one was his old friend Mohammed Said Pasha. In a second all his thoughts flew to Egypt: his farms, his house were forgotten and in two months he was at Cairo, busy talking to his friend and begging him for leave to take the canal in hand. Eastern princes have ways of their own, they have to be persuaded and coaxed, and are jealous, suspicious, and difficult to manage. His patron held out hopes, but was mysterious and would give no decided answer.

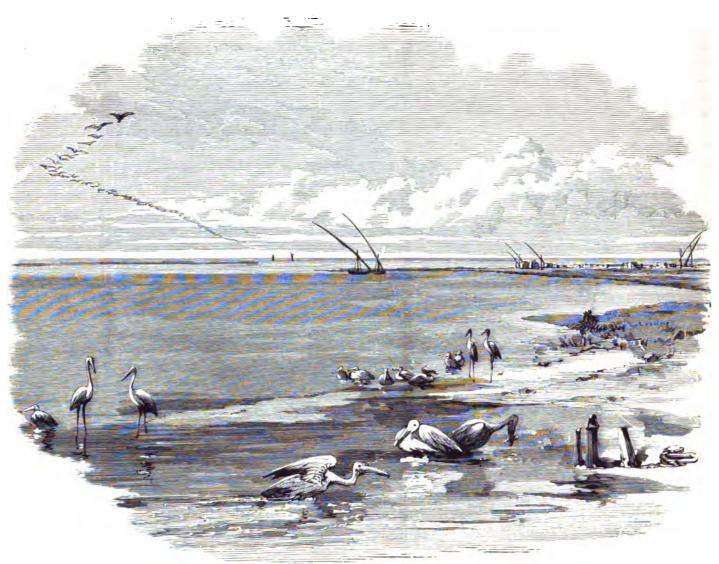
At last the morning of November 15th, a remarkable day, came round. "All of a sudden I saw a brilliant rainbow display itself and spread across the sky from west

to east. I own that my heart began to beat violently, and I seemed to see in this sign the true union of East and West, and a prophetic notice that the day was to be marked by the success of my scheme."

On the 25th the Viceroy assembled all his Court and announced that he intended intrusting the scheme to his friend. This news was received with approbation by all save the English Consul, who appeared not to relish it By the last day of November, what was called the "con-

received him affectionately; and, to help him with the preliminary expenses, made him a present of 100,000l. A nice Christmas-box!

But, unhappily, things were not to go so smoothly as he fancied. His way was suddenly stopped by difficulties. The first was the Sultan of Turkey, to whom Egypt belonged. The Viceroy was only his deputy. The Sultan's consent must therefore be obtained. This, he was told, was a matter of course when the Viceroy was



LAKE MENZALEH.

cession," or permission to make the canal, was signed, giving De Lesseps large profits, much land on both sides of the canal, and the enjoyment of the canal and profits for ninety-nine years.

It is wonderful to see how little time he lost in talking or debating. At Christmas he set off with two engineers to survey the ground. In this duty he spent three weeks, and found, by examinations, that there were no difficulties in the ground. He returned to Cairo, where his friend favourable; but somehow the consent did not arrive. He set off himself for Constantinople, and there found what was "stopping the way"—the opposition of no less a person than the English Ambassador, Sir Stratford Canning. This was a very serious matter. Sir Stratford was a man of whom it was said that he ruled the Sultan. The Turks cowered before him; the French and other Ambassadors were very submissive. He was called by them the "Eltchi," or great prophet.

"M. de Lesseps," he said, "all that you say is quite sound; and, if you succeed, the scheme is grand enough to bring you credit and honour. But it is not to be thought of for a hundred years to come It is inopportune."

To which our projector replied with spirit-

"My lord, if it seem inopportune for you, who are against my scheme, it is perfectly opportune for me, who am for it. If it be so useful and is to do me honour, why put it off for a hundred years? At that rate I sha'n't live to see it; and as I have entire faith in its being carried out speedily, I am anxious to see it done."

But his influence prevailed, and the projector was informed that they required further information. Baffled and disappointed, he hurried to Paris, secured the aid of the *Times* Correspondent there, and the more powerful influence of the Empress Eugénie, then in the full bloom of her power and attractions, and who was also a connection of his family. She threw herself into the scheme with the impulsive ardour of a Spanish woman. She was heard to say, enthusiastically, "The thing shall be done!"

England, however, strange to say, had determined that it should not be done. How strange does this hostility appear, when at this moment the canal is literally an English lake crowded with great English vessels filing through it day and night!

In June, 1855, Lord Clarendon, who was then Foreign Secretary, wrote a despatch in which he stated his objections, prophesying all manner of evils. They read very droll now, and have been completely falsified by events. Among his prophecies were these:—"It will be constantly filling up with sand; great expense will be incurred for the purpose of keeping it open. If they succeed in making it, it will never be a remunerative work."

No "enormous difficulties" were encountered, owing to the shallowness of the sea. There was no "constantly filling up with sand"—and, finally, no enterprise save, perhaps, the New River in London, has ever proved so remunerative.

Notwithstanding this hostility, our brave canal-maker determined to go to London, beard the British Lion in his own den, and try what his own persuasive eloquence would do. He attacked Lord Palmerston, the Prime Minister, boldly; he saw Lord Clarendon, the Foreign Secretary; but both formally told him they suspected the French had designs, that the English trade would suffer by it, and that, in short, it could not be.

The Edinburgh Review, when it heard of the canal, began also to prophesy:—"The cost of sending goods by sailing-ships would be far more by the Suez route, owing to the dangerous navigation of the Red Sea. Then it was questionable whether steamers would ever be able to compete with sailing-vessels for goods traffic."

Lord Palmerston again, now almost angry, told him, "All the engineers of Europe might say what they pleased. He knew more than they did, and their opinion would never make him change his one jot; he would oppose him to the very end!"

"I declare," says De Lesseps, "that at times I doubted whether I was listening to a maniac or a statesman."

With a heavy heart, and finding his prospects growing worse and worse, he appealed to the English people against the Minister. Accordingly, this Frenchman, not knowing a word of the language, determined to hold a series of meetings through the country. All received him and his explanations coldly but good naturedly. He spent a month at this work, visiting all the great capitals—Glasgow, Manchester, Dublin, and Belfast.

But now, by a strange turn of fortune, Lord Palmerston went out of office and Mr. Disraeli came in But, alas! he did not at first profit by this shifting.

Mr. Disraeli declared it was a most futile attempt and impossible. Mr. Gladstone, however, favoured and defended it in the House of Commons. But at Constantinople, whither our projector had hurried, two favourable changes had occurred. The hostile Turkish Vizier had fallen, the English Ambassador, the implacable enemy of the canal, had been recalled. De Lesseps pressed the affair again with renewed energy. His friends at the French Court took heart of grace and encouraged him. The sagacious Austrian Prince Metternich, gave him a wise hint—"Go on with the work: make a beginning and don't wait any longer for the Sultan's leave." This it seemed the moment had come for doing, so, quitting Constantinople and hurrying to Paris, he was now to cross the Rubicon and ask the whole world for money to help him to carry out the canal. Would he obtain it, when, at any moment, after vast sums had been spent, the whole might be suddenly stopped and the money lost? We shall now see. The French "Audacity, always audacity," is a good rule in such cases; and this new step was certainly audacious enough.

On the morning of December 26, 1858, every one in Paris learned that the Suez Canal Company, or, to give it its proper title, the Universal Company of the Maritime Canal of Suez, was launched under the happiest auspices. The concession was dated November 30, 1854.

The sum of money necessary to cut the canal was found to be 8,000,000*l*. sterling, though it was really to cost more than two and a half times that sum. The shares were 20*l*. each, and interest was to be paid on all the money from the date of subscription. In Paris alone 21,000 persons subscribed. They included all classes, rich and poor, and all professions.

Now this was a very clever stroke of De Lesseps, for he thus had engaged France itself, or at least Paris, in the venture. Anything done to him was now done to them

But now he found that the step he had taken had alarmed the Viceroy of Egypt. The English consul had been giving warnings in threatening style. All the debates

and intrigues began afresh. The Council of State met sixteen times to debate the question. All sorts of schemes were now proposed—one that the canal should be under the protection of the Powers in general. Once, indeed, a peremptory order arrived from the Sultan that the works were to be stopped. But our projector made his first appeal to the powerful French Emperor, who at once interposed.

#### PART II.

#### HOW IT WAS MADE.

Let us now attend our enthusiastic and valiant projector with his small corps of engineers as they come to examine the ground where their canal is to be cut. The difficulties were certainly of a serious kind. In Europe, if we make a canal, there is good firm sound clay to cut it out of, which



THE BITTER LAKE.

The Pasha of Egypt, in spite of a few vacillations, remained faithful to his old friend to the last. One of the latest acts of his life was to sell the Company a large tract of territory, known as "El Ouady." For this he only charged them 86,000l., though it contained about 30,000 acres. Only a few years later, when fertilised by irrigation and culture, it was sold to the succeeding Viceroy for 400,000l.

will preserve its shape. But here there was drifting sand or moist slob, which, if we made a hole in it, would fill up rapidly. It was evident, therefore, that they had not only to excavate but to build and consolidate. But let us begin at one shore and pass across to the other and thus try and call up the hopeless waste that greeted Lesseps's eyes.

Where the entrance from the Mediterranean was to be

made was the great Bay of Pelusium, a proper shelter and sounding well. But this was a delusion: it was shallow, full of shifting sands, and in most parts vessels could not get nearer to the shore than five miles! There was, in fact, "no water." Yet here it was proposed that the ships of the whole world should make their entrance. Having, however, touched the shore, it was found that the sea was separated from a huge lake, known as Lake Menzaleh, by a long strip of "slob" land that seems on the map like the rim of a tea-cup, a few hundred feet wide. This sort of sea-wall stretches across for about forty miles, and joins the two capes of the mainland together. Somewhere in this rim an opening was to be made for the canal; further on a port and town would have to be formed, with docks to shelter and repair vessels, warehouses to store goods, and all on a strip of slob land. There was no water, save only what could be transported on camels from Damietta. There was no stone. It seems almost incredible to read what has been done, and which seems the work of enchantment. Within ten years this strip of slob has been converted into a thriving town, known as Port Said, laid out in regular streets and squares, having 10,000 inhabitants; a fine port has been created, eight lines of steamers call there, and in ten months no less than 1000 vessels entered the port.

The difficulty of getting ships in to shore was first taken in hand by "running out" two long piers for a mile and more into the bay, and the spaces between which were dug out, and thus the proper depth of water found. This it was prophesied would entail massive piers of stone stretching out for five miles, and which would tumble in as soon as made—an utterly hopeless business! The ships, having surmounted this difficulty, would have to sail across Lake Menzaleh, which would, of course, save much labour. Alas! this was but little aid, for the water was but four or five feet deep, and there were to cross vessels drawing thirty feet! After the lake, the mainland is then reached at Kantara, where for about three miles it proceeds across a small tongue of land which separates the great lake from a smaller one, called Lake Ballah. It would then have to pass through Lake Ballah, a distance of about five miles, and there reach a hilly tract extending for nearly ten miles, and consisting of a gradually ascending series of hills culminating in El Guisr, thought to be one of the serious difficulties of the work. This plateau was about ten miles in length, and rose about fifty feet above the water-line. This surmounted, came Lake Timsah, where was to be the half-way port. Across this it was now to proceed for four miles. Then, though called a lake, it had long been dried up. It is now a great sheet of water, four miles long by three broad. Next was encountered a second plateau, that of Serapeum, stretching for about seven miles, its highest point being about five-and-thirty feet above the level. Then Suez was reached at last.

Such was a rough outline of the work to be done, but

when it came to details it was astonishing what dreadful difficulties presented themselves, entailing the highest ingenuity to surmount them.

First for Port Said. This was to be the port of entrance. On the 9th of March, 1859, De Lesseps with his men was standing on a narrow strip of sand, where the new port was to be made. Ten years later, he saw the piers of solid stone or concrete running out for nigh a mile, and forming a deep channel. This again was protected by a huge breakwater to keep off the drifting sand. Tall lighthouses displayed their lamps afar; behind had risen a busy town with broad streets and buildings, and a great population; and all in ten years!

For the making of long piers, breakwaters, &c., quantities of stone were necessary, and the enemies and the prophets of evil found plenty of work to occupy them. "There was no stone, no quarry nearer than Suez. How could he drag enormous stones over the desert for nearly 100 miles?" If you got the stone to the place and put them in position, the Edinburgh Review declared, "every block, every stone, will be swallowed up, and we shall not see a single one above the water."

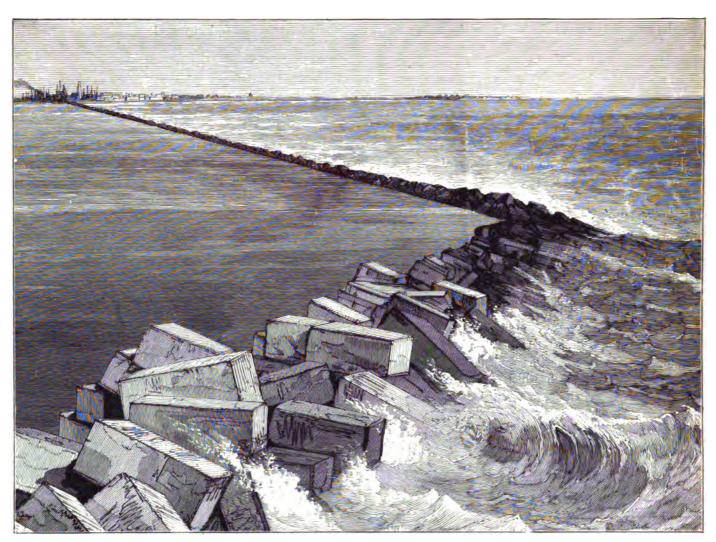
But quarries with plenty of stone were found at Mex, a short way off; but it was found even more convenient to use also great blocks of concrete fashioned on the spot. These were formed of sand and "hydraulic lime" brought from France. These elements were mixed together by steam machinery, run into huge moulds, and when dry became as hard as stone. Placed on a sliding plane, they glided down an inclined plane into the water, and were fixed in their place by divers. Each block weighed about twenty-two tons, and cost sixteen pounds sterling, and some thirty thousand were used. There was no water for the workmen, but it was brought in barges across the lake. after being carried from the Nile on the backs of camels and donkeys; three thousand animals being used for the purpose! These were often stopped on the way by the natives or officials. But the indefatigable De Lesseps freighted a steamer with machines for distilling sea water into fresh water, and thus became independent of donkeys, donkey-boys, and camels.

The next stage, as will be seen by a glance at the map, was the great shallow Lake Menzaleh. Often in England, when a railway embankment is run across an arm of the sea, this soon becomes "slob land"—covered with water indeed, but shallow. Now it would seem a difficult thing to make a channel for large vessels to sail through in such a place; you might, indeed, dig out such a channel, but its sides would melt away. It was proposed to rear two banks, but these would have to rest on the slippery foundation, and would certainly tumble in, like a shape of ice melting on a warm day. This "slob" at the Lake Menzaleh was formed by the overflow of the Nile, which, sweeping over the fields and sands, brought with it stores of mud and gravel. Who could expect that such a foun-

dation would support banks? All these difficulties vanished as they did on the London and Birmingham Railway when it had to be taken across Chat Moss. A simple remedy was found. The natives knew well how to deal with it, after a very primitive fashion of their own. Scooping up a large mass of mud, they squeezed the water out of it by pressing it against their chests. It thus became tolerably firm and solid. These were piled up in lumps on each other till they dried. In this fashion low banks were raised and stood firm.

boats are marked by delusions of this kind. The excavation was made, the sand did not fall in, but consolidated itself.

But there was one notable feature in this great work, which was to benefit the country itself. To make such a canal—nearly 100 miles long—water was indispensable, and as there were now from 15,000 to 20,000 labourers employed it was impossible to think of carrying water from a distance. A single day's supply would exhaust all their resources. The plan therefore was to



THE BREAKWATER, PORT SAID.

Passing the lake they now came to dry land, through which they had to cut for eight or ten miles, when they were confronted by an immense hill, or plateau, known as El Guisr. English navvies would smile at such an impediment, and make short work of it; but then this was a hill of sand, and if you cut a trench in a great heap of sand, as it is all loose the sides fall in and bury the workmen. This seemed likely enough, but nothing of the kind occurred. All the attempts at making railways and steam-

make the water accompany them on their march, i.e. make a special canal for drinking-water.

The first idea, a rude one, was to have a small stream of water running along the side of the Grand Ship Canal. But a better one occurred. The Nile River was tapped at Cairo, and by a canal, eight feet deep and sixty wide, brought down to Lake Timsah on the Marine Canal. As soon as this was reached the rest was easy. Water towers were erected, and pipes laid down which conveyed

the water as far as Suez. On this the Fresh-water Canal was continued side by side with the other from Lake Timsah on to Suez. It thus watered the country for a vast extent and over a large area, and was, in fact, another canal.

The half-way house, as it might be called, consisted of a few huts. It is now called Ismaïlia after Ismaïl Pasha, the ruler of the country. Nothing is more wonderful than the change produced in this desolate spot since that year. In seven years it had burst into a brilliant French town, a quay running along the edge of the lake. "The new town of Ismaïlia," says a visitor in 1869, "has now more than 6000 inhabitants, of whom more than a third are Europeans."

After passing the hill of Guisr came the "Bitter Lakes," which was the one locality which spared the workers labour. But that was for eight miles only, where the depth was sufficient. Then came the last obstacle, the great *chalouf*, in which was found a vast barrier of actual *rock*, which it would have been a fatal and interminable delay to remove by blasting. A readier mode was found. Then was reached the sea at Suez.

At Suez a marvellous transformation has been effected from the collection of a few wretched huts and houses that formed the town. Now there are vast sea-works, piers, quays, sheds, dry docks, warehouses, and railways. "Not more than four or five years ago," says Captain Clerk, writing some years ago, "Suez was an insignificant Egyptian village, containing 4000 inhabitants, but exhibiting no signs of life, except when the steamers of the Peninsular and Oriental Company, and subsequently those of the Messageries Impériales, were embarking or disembarking their passengers and merchandise. The absence of water, and the dearness of provisions, both of which had to be brought from Cairo and the surrounding districts, rendered it as uninviting a spot as can well be imagined. The advent of the Fresh-water Canal has brought about a marvellous change. The population has now increased to 25,000, and there is a degree of life and activity about the place clearly indicating the energy that is being displayed on all sides."

Such is a short survey of the work the labourers had before them. After all, it did not seem anything very Herculean to overcome. But few would conceive the difficulties of every kind that beset De Lesseps as he advanced. Nay, even the mode of excavation called out all his power of invention. For it was absolutely necessary to find some mode of doing this speedily and cheaply. To set his 20,000 men, with spades and picks and wheelbarrows, to dig and wheel away would be starting on a task that would take forty or fifty years. He devised machines to do the work on the grandest scale. These aids were monster dredgers, which, of a smaller size, are seen in most river ports, but it was the engines that were attached to them that had novelty. These dredges were of about eighty horse-power, and cost each £20,000. The ingenuity of De

Lesseps's engineers contrived that the mud and clay should be scooped up and discharged at once on to the place where it was to form the bank. There were two sorts of these machines; one was called the Long Duct or Discharger, the other the Elevator. The Duct was a long tube, five feet wide and two deep supported on a barge of its own, and passed from the dredge to the shore. It was over two hundred feet long. All the mud and stuff dredged up fell into it. As it would "stick" there and accumulate according to the property of mud, a stream of water was pumped into it from a small engine, which made it move on. It was thus wonderful to see the mass of mud raised out of the water-raised in the air, as it were—on to land, where it was deposited in a growing heap Contrast with these machines doing this steadily and without a break lifting and emptying, the continuous process of an army of men filling barrows and wheeling them away along planks.

The most curious part of the system was this, that water and the dredge were the only two means used to scoop out the canal. Once there was water enough to float a dredge—and three or four feet depth was sufficient—it could be dredged then to twenty or thirty feet. Hence, the course was to dig a few feet down, admit the water from the Freshwater Canal, then float in the dredges, which did the rest.

There was one unfortunate element in the undertaking which soon began to excite attention. The great army of labourers—nearly 20,000 strong—were not free workers as in Europe. They were taken from their homes and compelled by the Pasha to work at the Canal just as their forefathers had been forced to work at the pyramids. This system obtained in Egypt, and though the company paid them and were obliged to take care of them during sickness. This continued for the first three or four years, when the English, always ready to interfere on behalf of the slave, began to clamour loudly. Members of Parliament, Mr. Layard among others, took the matter up warmly, and at last our Government addressed a formal protest to the French against the system.

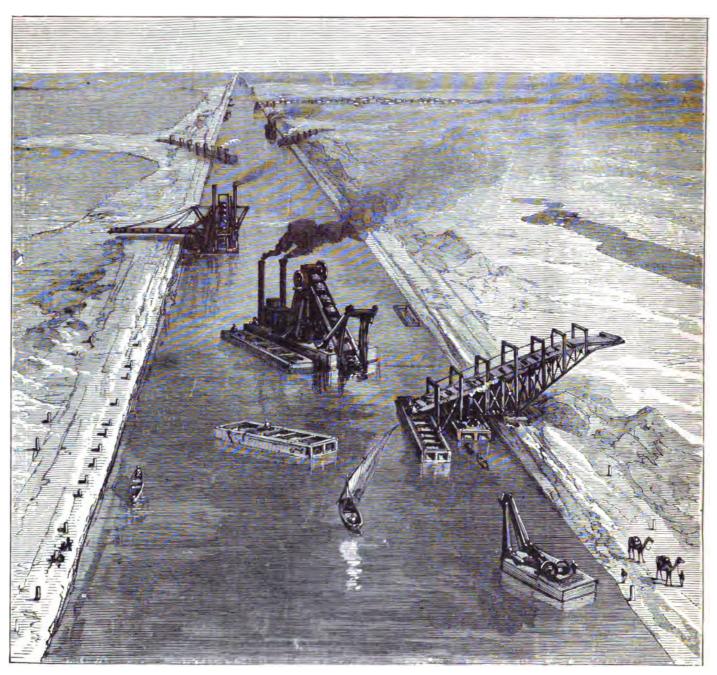
It was complained that they were brought from enormous distances, that the payments were made to the credit of the Viceroy, who, as it were, contracted for the labour, and supplied biscuit as food, and that the men at the end of this term merely received a certificate from the Company, and no cash.

It was urged that in July, 1863, the system of paying the men directly was abandoned, and that portions of the works were allotted to the sheiks, who saw that the task was accomplished, and then received a bulk sum for distribution. Further, that the men were brought to the works in great bands, and that if they attempted to leave before the end of the month they were brought back by force. This was met by a distinct denial, the men being paid personally, though it was admitted that they were placed under the control of sheiks.

This was all denied. The Company, indeed, protested that they took infinite care of their labourers, and had a staff of 400 people whose sole duty was to look after the food. Before the canal was finished there was close on 80,000 men employed.

At this time the Viceroy of Egypt had shown symptoms

forced labour should be used, that is, that the government would not any longer compel the natives to work. The instant falling off in the attendance and the flight to their homes show that there must have been some element of slavery in the system. On this check the works were almost brought to a standstill; the money was failing, and



DREDGES AT WORK IN THE CANAL.

of jealousy, and was not friendly to the Company. The canal now seemed likely to succeed, and would be a dangerous institution in his dominions. Worked on by many influences he determined to deal it what he thought would be a crushing blow, and by a decree forbade that any

for two years scarcely anything was done. The enemies of the undertaking were jubilant as they saw its ruin approaching.

But De Lesseps was not to be daunted; obstacles only called out his further energies. There were other matters

in dispute with the Pasha; the lands his predecessor had given away so lavishly were rising in value every hour. He wished to get them restored. Hence there arose disputes and anger. But the adroit De Lesseps knew how to deal with him. The withdrawal of the forced labour was a violation of the contract, and required that "damages" should be paid to make up for the increased cost. He applied to his friend and patron, the Emperor of the French, for protection for himself as well as for a large mass of French shareholders now on the eve of ruin. Their cries the Emperor could not neglect. He required that the whole dispute should be submitted to him. There was no refusing the monarch of many legions, and, as might be expected, he decided for his own subjects. The Viceroy was to pay an indemnity of 1,520,000l.; the Company should cede to the Viceroy all their fresh-water canals, reserving only the right of passage through them; the Viceroy should pay 400,000l., representing the cost of the construction of the canals, and 240,000l. as compensation for the tolls.

After this success, fresh money having come in, the works were resumed. Vast numbers of "navvies" came over who received an outfit of 5l, and as much more for the food on the journey out. They were to work three years and receive 7s. 6d. a day. For three shillings a day food was found for them. Now, everything went on afresh and with renewed vigour. News at last reached Europe that a little boat had actually floated through the dredgings and canals from sea to sea. This was a long way off from the state of things when a P. and O. steamer or an ironclad could go through. Still it was wonderful, and caused some surprise.

We have by this time forgotten all about the Sultan and his consent. The truth was it was not necessary now, as the work was nearly done, and could not be undone. Indeed M. de Lesseps, addressing a meeting of his shareholders, said very plainly, "Who talks to us about firmans at this time of day? Haven't we the firman of the Emperor of the French and of France?" This burst of chauvinism was saluted with immense applause. When it arrived, which it did after being twelve years on the road, no one heeded it.

#### PART III.

#### HOW IT SUCCEEDED.

But we need not delay longer. As the end came in sight and drew nearer and yet nearer, and the the canal was daily deepened and widened, exertions were redoubled. At last it was almost done save the last hill, that of Chalony near the end, close to Suez, which was not yet cut through. It was now the year 1869.

One of the most interesting questions connected with this

grand scheme, now so successfully carried out, was the money part. That ditch or canal had cost enormous sums. Most wonderful of all was the confidence shown in the projectors. Never did they lose faith in him in the face of disaster and checks of every kind. He had such an art that he always succeeded in extracting what he wanted. And how much was this sum? What did it all cost? First of all EIGHT MILLIONS sterling was put into his hands in the year 1858. In nine years this had all been spent, when he asked for four millions more. By 1869, when it was opened, the expenditure had therefore reached nearly TWELVE MILLIONS. It was really not much over the original estimate, for we must not charge the projector with the losses owing to the forced labour being withdrawn, &c.

A single instance will be a good commentary on the profits of the work. On the day of the new year, 1883, the tolls paid by the ships passing through the canal amounted to over 7000l., and each share of about 16s. was worth nearly 3l. 10s., or more than five times its original cost. No wonder that this wonderful man should be considered one of the most remarkable men of his day. His work is indeed a marvellous sight to look on. The stream of vessels-enormous ones-Indian transports with some thousand persons on board, ironclads, steamers of all sizes and patterns, are perpetually passing through in long procession. The canal is found too narrow, though it is over a hundred feet wide; and as one vessel will sail faster than another, what are called "sidings," or lie-by places, are cut out of the banks at intervals, where the slow vessel must wait and let her faster follower pass. Sometimes a large vessel runs on the bank and "sticks fast," stopping the whole procession as an overthrow cab in Cheapside will stop hundreds of carriages and carts following behind. It is necessary, therefore, to have a great body of regular pilots who know all the turns and dangerous places of the canal, and accustomed to guiding a vessel through. A vessel must go very slow, so the passage takes over a day and a night. As was said before, it is incredible the change wrought in the thirteen years since it has been open. Suez is reached, and the vessel emerges into the Red Sea to pursue its voyage to Bombay.

A few figures will conclude this ever wondrous tale. The original capital of the canal was eight millions, but the total cost reached to TWENTY. Regular dividends did not accrue till 1873, when the receipts were 915,000l. In 1883 they were 2,632,000l. In 1882 the dividends were 16½ per cent. In 1883 the English traffic was represented by over 2,500 vessels, with a tonnage of over 6,000,000 tons; the French by but 272 vessels, with a tonnage of 782,000. Other nations furnished little above 400 vessels altogether. Who shall say that the English interest in the canal, fortified by its shares of the market value of 8,000,000l., is not overwhelming?

#### THE PROPOSED NEW EQUIPMENT FOR THE GERMAN CAVALRY.

(Translated from the Militar Wochenblatt).



HE necessity of cavalry acting as mounted infantry has for long seriously engaged the attention of the German military authorities, who seem to consider that the arme blanche cannot continue to hold for cavalry the primary place on the battle-field. They must henceforth

be taught to fight also as foot-soldiers; and in the newly proposed equipment it is the carbine, and not the sabre, that is to be inseparable from the rider. This view of the subject has led the German authorities to experiment on the best manner of carrying the carbine; and after exhaustive trials a method has been devised which is reported upon as best answering the conditions laid down. The most important of these essential conditions are the following:—

- 1. The carbine must be so carried in the field that its bearer may always have at command a large number of cartridges, if separated, willingly or not, from his mount.
- 2. The position of the carbine shall be such that no man, riding singly or in the ranks, shall be incommoded and that it shall not hinder the rider from the freest movements.
- 3. It must be easy for the rider, immediately after dismounting, to release his carbine from its case, to load and fire; and after the skirmish rapidly to re-attach it to his person, without preventing him from quickly remounting.
- 4. The operation of handling cartridges must be so simplified that it may be performed in the act of rapid riding.
- 5. For peace and long marches it would be desirable that the carbine should be attached to the horse.
- 6. Any exceptional damage to the uniform must be obviated.
- 7. Any increase in the burden of the horse is inadmissible.
- 8. The adjustment must be acceptable to the military eye.

Under the proposed equipment, the carbine is carried in a short leathern case, which, slanting from the left shoulder to the right hip on the back, is attached both by a waistbelt and a strap brought over the left shoulder.

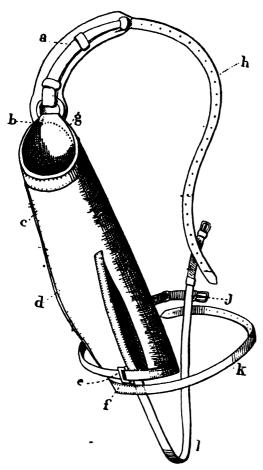
It will be seen from the accompanying diagram that the case, which at c is 15 cm., widens at the lock to 27.5 cm. and narrows again to 24 cm. at the base. From the base upwards it is hollowed out to the length of 19 cm. to admit of easily inserting the carbine from beneath. The material used is stiff, strong leather. It is bound on the upper edge with a firm leathern band, which contains the ring

for the suspensory strap. That portion of the base which does not touch the body (i.e., the outer part) is 0.75 cm. deeper, in order to prevent the two parts of the waist-belt from overlapping. The buckling gear of the waist-belt, sewn on to the front of the case, is 60 cm. long, and, running to the back, is conducted past the hollowed portion of the case by an oblong metal runner, fitted with a roller in order to prevent it from catching. This gear is brought to the front by the left, where it meets the perforated end of the waist-belt. The latter, it may be observed, is made longer than the requirements of the rider necessitate, because, as aforesaid, in peace or on long marches the



carbine with its case should be attached to the horse. The suspensory strap is sewn on to the end of the hollow of the case itself. Its buckling gear, 80 cm. long, comes on to the heel-plate of the butt, down to the lower surface of the former, which is slightly indented to receive it. The strap then passes upwards by the inner side of the butt, over the right hip and across the breast, where it is buckled to the upper part of the suspensory strap, which is also 80 cm. long, and ends in a ring fastened to the upper portion of the case.

The carbine is so inserted through the under opening that the lock-plate turns outwards, while the reverse side lies flat to the rider's back. By this arrangement it is manifest that the smooth surface of the stock comes into contact with the rider, and friction is consequently reduced to a minimum. Every feeling of pressure is thereby obviated;



a, Leathern under-lay; b, Metal ring; c, the case 15 cm. long to — d, bulge for lock 27.5 cm.; c, Oblong metal runner for that portion of the waistbelt to which the buckle is attached; f, Bottom of case, 24 cm.; g, Top of case, 15 cm.; h, Perforated part of suspensory strap, 80 cm. long; j, Buckling gear of the waistbelt, 60 cm. long; k, Perforated portion of the waistbelt, 80 cm. long; l, Buckle part of the suspensory strap, 80 cm.

and a three months' trial has proved that no uncomfortable sensations are experienced by the rider through carrying the case gear. The only drawback is a slight increase of wear and tear on the back of the cavalry jacket, but it is not serious enough to invalidate condition 6, as afore mentioned. As the upper portion of the suspensory strap is 6 cm. broad, it clears the shoulder in epaulette fashion, and cutting and undue pressure are both obviated. Furthermore, as the chief weight of carriage is centred at the waist-belt, the rider feels no contraction at his breast, while the free and easy movements of his arms and body are not interfered with.

After the carbine has been inserted into the case and the suspensory strap slacked off for the purpose, the waistbelt must be firmly buckled and then tightened so much that the general position of the carbine gear is taut, with the butt so far elevated above the right hip that the rider may feel no abnormal pressure from its presence. When it is required to take the carbine from its case, the waistbelt is slackened, the right hand loosens the suspensory

strap from the heel-plate of the butt, which, giving free play to the case, allows the latter to be slued to the front. While the right hand grasps the opening, the left draws the carbine out. The case can be quickly jerked back, and remains hanging in such a manner that it can be readily fastened by tightening the waist-belt. To return the carbine to its case, the same motions in inverted order must be carried out. The waist-belt can be tightened after the rider remounts; an advantage through which much saving of time is effected. It is claimed for this invention that the most inexperienced can easily learn these few and simple operations.

The pouch and shoulder belt are done away with, and the ball bags (two) are attached to the waist-belt on runners by which they can be shifted from the front to the rear, as needed. If required in peace or on long marches, the carbine can be placed as of old in the carbine cover, and then inserted in the newly-invented carbine case. In this event the waist-belt is used as an attachment strap, while the suspensory strap is wound spirally on the case. In order to lighten the burden of the rider, the ball bags can be carried on the horse.

The following details in accoutrement are dispensed with:—

Total				2.410	-Lux
3. Carbine straps, etc	•	•	•	0.650	"
2. The present carbine bucket					
1. Pouch and shoulder belt		•		0.820	kg.

Per contra, the following are added:-

1.	The new carbine case	е	wi	th	w	ais	t a	ın	d	
	suspensory belts .		•						0.580	kg
2.	Two ball bags								0.280	"
	Carbine cover, etc.									
			Т	'ot	al				1.490	ko

It will be seen from this table that a saving of 092 kg. or about 2 lbs. is effected, accompanied also by a diminution of cost in consequence of the above-named articles being dispensed with.

Finally, it must be confessed that the new accourrement does not add to, but possibly detracts from, the smart appearance of the trooper; while it may at first be strange and slightly inconvenient. These trifling considerations apart however, its practical convenience and utility can hardly admit of serious dispute. A rider of only ordinary physique has given it the fullest and most complete trial. For three months of field service, of regimental and brigade drill, as also in the late German manœuvres, he has worn the above described invention, and affirms that he is now not in the least inconvenienced by its presence. Such a practical test is of infinitely greater value than the most ingenious theory that can be devised as to its serviceability in the field.

#### "MY FIRST BATTLE AND MY LAST;"

#### OR, RECOLLECTIONS OF THE PENINSULAR WAR.

BY J. PERCY GROVES, LATE 27th Inniskillings.

(Author of "From Cadet to Captain;" "Charmouth Grange.")

#### CHAPTER III.

"Between the acting of a dreadful thing, And the first motion, all the interim is Like a phantasma or a hideous dream."

Passage of the Douro-Defence of the Seminary-Soult's evacuation of Oporto.

THE morning of May 12th, 1809, broke bright and clear; the rain had ceased, the heavy black clouds had passed away, and the sun rose in all his glorious brilliancy, casting a flood of golden light over the surrounding country. Shortly before six o'clock Sir Rowland Hill's column got under arms, and marched to Villa Nuova, a suburb of Oporto on the south bank of the Douro, where the Oporto Wine Company had their chief stores; here we halted. The opposing armies were now face to face, and Soult found himself threatened front and right by Wellesley and Hill, and rear and left by Beresford, who having driven Loison from Amarante had reoccupied that town, and was, therefore, on the same side of the Douro as the French.

Soult had destroyed the bridge of boats, and withdrawn all the craft he could find to his own side of the river, and so considered himself secure from any attack on his front and right. A deep swift stream more than a quarter of a mile wide, would have proved an insurmountable obstacle to most men, but Sir Arthur Wellesley—albeit he had no pontoon train—determined to make the attempt to get over, and at once set about to find some means of crossing. By a fortunate chance, Colonel Waters of the staff, heard that a certain barber of Oporto had eluded the vigilance of the French, and come over in a small skiff on the previous evening to Villa Nuova. Waters, with the assistance of the prior of Amarante, got hold of this man and induced him to point out the spot where he had concealed his boat.

The frail craft was dragged from its hiding-place amongst the rushes, and the barber rowed Colonel Waters and the prior across the Douro; pulling close under the bank, they came upon four large barges which the enemy had left unguarded, and these they succeeded in bringing over to Villa Nuova. In the meanwhile Sir Arthur Wellesley had eighteen guns placed in position on a rocky eminence in the grounds of the convent of La Sierra to cover the

passage should it be attempted; and he ordered Hill to move our brigade closer to the convent, while the Guards' Brigade under Sherbroke occupied Villa Nuova. About ten o'clock Colonel Waters reported that one barge was ready, and had been brought round to a small inlet beneath the convent gardens where it was completely concealed from the view of the enemy.

"Well," said Sir Arthur, laconically, "let the men cross."

The Light Companies of the regiments composing our brigade, were at once marched quietly down to the water's edge, and an officer and twenty-five men of the 3rd Buffs jumped into the barge and pushed off.

On the opposite bank of the river, nearly facing the convent, was an isolated building known as the "Seminary;" the detachment of the Buffs having got over unperceived, took possession of this building, which was easily approached from the river, but on the land side was protected by a high wall, pierced by a single gateway, opening on to the Vallonga road. The Seminary commanded all the country on the north bank of the river, but was itself commanded by the battery on the convent rock.

As soon as the Buffs had landed, another boat was sent across, and in a very short space of time the three light companies were safe within the walls of the Seminary. Sir Rowland Hill had crossed with us in the second boat, and under his direction we set to work to barricade the iron gates, and, as far as possible, render the building defensible.

The banks of the Douro being steep and precipitous, and the crossing-point out of sight of the town, the passage had, so far, been effected without attracting the attention of the enemy; but suddenly the loud boom of a big gun, followed by the roll of drums and the blast of trumpets, warned us that the alarm had been given.

"Stand to your arms!" cried our gallant leader. "And you, sir," he added turning to me, "run up to the top of the building, and let us know what Soult is about. Take half-a-dozen men with you, and open fire upon the enemy as soon as they are within range."

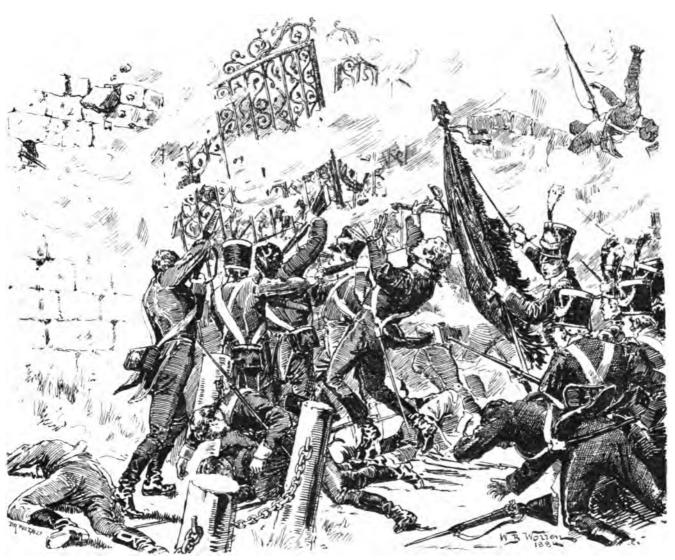
I made my way up the steep narrow stairs, followed by a sergeant and three files, and entered a sort of attic which ran the whole length of one wing of the building; here I stationed myself at a window, from whence I had a full view of the country round Oporto. It was a glorious scene!

The beautiful river wound its way through a well-cultivated district, studded with olive groves and cork-tree plantations, and, passing by the town, gradually widened as it went until its waters mingled with those of the broad Atlantic. Beneath the massive walls of Oporto the French were rapidly forming, and I soon descried a strong column of infantry advancing at a run down the

brave commander encouraged them both by voice and gesture: they were indeed:—

"Formen worthy of our steel."

There was a very smart corporal of the Light Company, Patrick Phelan by name, standing beside me at the window; he had formerly served in the 95th Rifles, but was "claimed" by an elder brother, and transferred to us shortly before we left Cork.



THE FRENCH TIRAILLEUR ATTACK ON THE SEMINARY.

Vallonga road; it was the 17th Regiment of Voltigeurs, led by General Foy. As they neared the Seminary, the leading companies deployed, extended front, and advanced in light marching order—en tirailleur—across the open ground. At the same time, half a troop of horse artillery galloped up at full speed, and taking up a position on a slight eminence which commanded the river, unlimbered and opened fire on the boats.

The Voltigeurs came on in splendid style, and their

"Pon me soul, Misther Wyatt," exclaimed Phelan, as we watched the enemy, "I do belave av l'd me ould rifle, I could knock over the officer on the big grey horse! Him wid the quare cocked hat, sorr."

"Have a try with 'Brown Bess,' man," said the sergeant; "may be if you pick off their leader, it 'll stop 'em a bit. Anything to gain time, you know, sir."

I nodded to the ex-rifleman, and he, resting his musket on the window-sill, took aim and fired; his bullet missed the general but struck an officer riding at his side, and brought him to the ground.

"Betther luck next time," coolly observed the corporal, as he reloaded his musket; "but I think we've about got the right distance, Misther Wyatt."

The enemy being well within range, the men commenced firing, whilst I hastened down to make my report. On reaching the courtyard I found that another detachment of the Buffs and 48th had come over in safety, and the preparations for the defence were nearly complete. The ground to the west of the Seminary was swept by the guns on the convent rock, and knowing this, Sir Rowland Hill reckoned that the French would be compelled to confine their attack to the side of the building which bordered on the Vallonga road, and that their chief efforts would probably be directed against the gateway; he formed his plans accordingly.

The gateway measured about eighteen feet across, and was closed by iron gates the bars of which were four or five inches apart; these gates opened inwards. A barricade five feet high, composed of casks, barrels, tables, &c., was erected right across the opening and close up to the gates; behind this barricade our Light Company was posted. The walls on either side were roughly loop-holed, and defended by the Light Companies of the Buffs and 48th; and detachments of those regiments occupied the first and second stories of the house, ready to open fire from the windows which overlooked the roadway and entrance.

When the enemy were within thirty yards of the walls, we delivered a telling volley, which brought several of them down; but, nothing daunted, and gallantly led by General Foy, they pressed forward to the attack.

We kept on firing as hard as we could until they came close up, and then, what I may fairly call a desperate hand-to-hand conflict ensued.

The Voltigeurs threw themselves against the gates, and strove to force them open, but our brave fellows sprang upon the barricade, and bayoneted every man they could reach.

I saw Corporal Phelan (who had left the house to join in the fight) run two officers through the body, one after the other; an old Voltigeur sergeant enraged at this, thrust his musket between the bars of the gate until its muzzle almost touched Phelan's legs, but before he could pull the trigger I pressed forward and plunged my sword into his throat; the poor fellow fell back and was trampled beneath the feet of his comrades.

General Foy was now reinforced by some regiments of Mermet's division, and we were very hard pressed; one gate was nearly wrenched from its hinges, and every moment I expected to see it down, indeed, it is my belief that nothing but the pressure of the crowd without kept it standing. Several attempts were made by the enemy to scale the lofty walls, but no sooner did a Frenchman show his head above the coping-stone than he was shot by our men posted at the upper windows.

I have rather a vague recollection of the part I played in the desperate defence of the Seminary, for the roar of the cannon, the rattle of musketry, and the shouts and yells of the combatants, was enough to confuse an older head than mine. After I killed the Voltigeur sergeant my sword was wrenched from my hand, and I snatched up a musket and bayonet (which by the way proved a far more effective weapon), and with this I fought throughout the day. By noon the whole of the brigade had crossed the Douro, and shortly afterwards the French infantry withdrew out of shot, in order to allow a sevengun battery, posted in our front, to open fire upon us.

Up to this time it had appeared doubtful whether Sir Rowland Hill would be able to hold his own against the vigorous and repeated assaults of the enemy. General Murray, who had been sent (with the German Brigade, the 14th Light Dragoons, and two guns) up the river to Avintas with orders to cross by the ferry at that place, had not yet come to our assistance; and now the guns in our front opened upon the Seminary, and did considerable damage to the walls.

At this critical moment the French evacuated the lower town of Oporto, and as soon as their sentries were withdrawn from the quays and wharves, the citizens jumped into boats and rowed across the river. In the boats thus obtained, the Guards' Brigade came over, and hardly had they landed, when Murray's advanced guard appeared in sight. As soon as it was seen that Sherbroke on one side and Murray on the other were coming to our assistance. Mermet's division retired along the Vallonga road; but the battery in our front continued to fire upon us. Sir Rowland at once ordered the Light Companies to assume the offensive and storm this battery; the barricade was thrown down, the gates flung open, and with a ringing cheer, we advanced in skirmishing order to the attack, supported by six companies of the brigade—two from each regiment.

The Frenchmen stood by their guns and received us with grape and canister, which inflicted severe loss upon us; my captain and brother subaltern were both struck down, and I found myself in command of the company.

The next minute we were swarming over the low parapet and through the embrasures of the battery, which was defended by seventy or eighty artillerists, and a company of a line battalion. Directly we gained the top of the parapet, the gunners ran back their field-pieces and limbered up, but before they could gallop off, a party of the Buffs and 48th took them in flank, shot the drivers and horses nearest to them, and succeeded in capturing four guns out of the seven.

In the meantime the French linesmen met us at the point of the bayonet, and tried hard to drive us back; one of their officers singled me out for attack, and ran his sword through the fleshy part of my arm, but I retaliated by breaking the stock of my musket over his head, and he

went down as if shot. The impetuosity of our attack carried all before it, and in less than ten minutes we had driven the last of its defenders from the battery.

The French were now in full retreat; Hill advanced from the Seminary and poured volley after volley into the retreating masses, and they had also to run the gauntlet of Sherbroke's fire; whilst two squadrons of the 14th Light Dragoons, led by Brigadier Charles Stewart, charged their rear-guard as it was passing through a narrow road, and took General Laborde prisoner. Soult's army must have been completely routed had General Murray only done his duty, but for some inexplicable

wounded; amongst the latter were Generals Laborde and Foy. Soult also left his sick and wounded, fifty pieces of ordnance, and a large quantity of stores behind him, all of which fell into our hands.

Sir Arthur Wellesley personally thanked the brigade for its exertions, and the same evening the following order was issued:—

"GENERAL ORDER, Oporto, May 12th, 1808.—The commander of the forces congratulates the troops upon the success that has attended the operations of the last four days; during which they have traversed above eighty miles of most difficult country, have carried some



CHARGE OF THE BRITISH INFANTRY UPON THE FRENCH BATTERY.

reason, he allowed column after column to pass him unmolested; and not a man of his force advanced, except the 14th Light Dragoons.

After taking the battery we rejoined our comrades at the Seminary, and that same afternoon entered Oporto, where we were received with every manifestation of joy by the delighted citizens.

In this action the British forces had 115 killed and wounded, out of which number my regiment lost thirty-five men—exactly one-third of the total.

The French casualties amounted to 500 killed and vol. II.

formidable positions, have beaten the enemy repeatedly, and have ended by forcing the passage of the Douro, and defending the position so boldly taken with a number far inferior to that by which they were attacked. In the course of this short expedition, the commander of the forces has had repeated opportunities of witnessing and applauding the gallantry of the officers and men."

As soon as we could get away from the town, young Hale and myself, accompanied by Corporal Phelan and

two privates, went in search of Hewitt and Lang-the captain and senior subaltern of the Light Company—who had fallen in the attack on the battery. There are few sadder sights in life than a "stricken field," when the fight is over. Though the number of killed and wounded at the passage of the Douro was small when compared with the carnage of other Peninsula battles, still the scene was horrible enough. The Vallonga road was strewed with dead and dying, and the cries and groans of the wounded were agonising to hear. Striking off to our left we made for the battery, and about a hundred yards distant from it we found our poor comrades. Hewitt and Lang, lying close to each other. Lang was shot right through the heart; he appeared to have died instantly, his handsome face wore a peculiarly peaceful look, and it was a melancholy satisfaction to think that' he had suffered no pain. Hewitt was still alive, but desperately wounded, his right leg being completely shattered below the knee. An officer of the 48th, bent on a similar errand to ours advised us to carry him to the Seminary, where three surgeons were attending the wounded, and thither we turned our steps.

What a sight here met our eyes!

In front of the gateway, which we had so obstinately defended, was a ghastly heap of Voltigeurs; most of them had been bayoneted, and they lay open-eyed and openmouthed, with an expression of agony on their features, as appears to be nearly always the case when men have been killed by the "cold steel." One of the gates was down, and beneath it were the mangled corpses of ten or fifteen Frenchmen. The walls of the enclosure were sorely damaged by the artillery fire, and the building itself had suffered considerably.

We carried poor Hewitt into an outhouse, where we found three of our own men waiting to be operated upon; and here too was our own assistant-surgein, who at once took charge of the wounded man.

Next morning the brigade marched in pursuit of the enemy, and on the 15th we entered the ancient city of Braga. Here intelligence was received that Soult had succeeded in leading his demoralised forces into Spain, and had joined Ney at Lugo. During this flight he abandoned nearly all his artillery, stores and baggage, and reached Lugo in a deplorable plight. In fact the retreat of Soult from Oporto was to the full as disastrous as that of Sir John Moore from Coruña, six months before. We all felt that the honour of the British army had been vindicated and Moore amply avenged; and our confidence in the skill and courage of our distinguished general was increased tenfold.

#### CHAPTER IV.

Three hosts combine to offer sacrifice;
Three tongues prefer strange orisons on high;
Three gaudy standards flout the pale blue sky;
The shouts are—France, Spain, Albion, Victory!
——CHILDE HAROLD.

Changes—His Reverence of Garia—From Portugal to Spain—Talavera-dela-Reyna—The Battle—Repulse of the Imperial Grenadiers—Victory: —Invalided—Resting on my Laurels.

A MONTH passed away, and we found ourselves encamped on the banks of the Tagus, opposite Abrantes, a fortified town of Estremadura. While here the brigades of the army were re-formed into divisions, and our brigade was given to Brigadier Tilson, and attached to the 2nd division which was commanded by Major-General Sir Rowland Hill.

There were changes too in the regiment at this time; our colonel had been invalided home, and was succeeded by the senior major; my former captain, George Baker, was given the Light Company, vice Hewitt, whilst I obtained the vacant lieutenancy, and young Hale took my place as ensign.

On June 27th, Sir Arthur Wellesley broke up the camp at Abrantes and marched for the Spanish frontier. Our brigade left the same day, and crossing a rocky, barren tract of country, halted near the village of Garia. Baker, Hale and I found quarters in the cottage of the padre—a stout old fellow who looked as though he thoroughly appreciated the good things of this life, both edibles and potables. Our baggage had not yet dwindled down to a haversack and one pair of socks; and we were the happy owners of two excellent mules, upon whose broad backs were strapped our portmanteaux and other impedimenta.

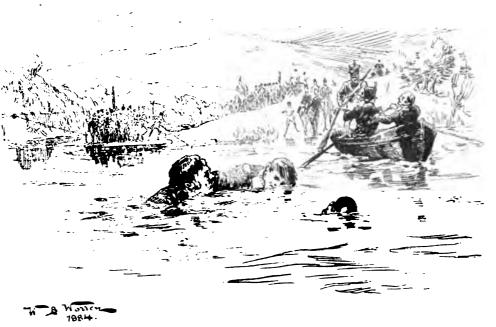
On halting at Garia, our servants picketed the mules in the padre's garden, and conveyed the baggage to the room allotted to us. Entering this room in the course of the evening, I discovered our host upon all fours before my open portmanteau, from which he had abstracted a flask of brandy. The old villain was so intent on his work of pillage that he did not hear my footsteps, and was raising the flask to his mouth, when I sprang forward, and caught him a cut across the-well, not the head-with a switch which I held in my hand. With a howl of pain and terror, the padre jumped on his feet, and beat a hasty retreat, swearing in a very unclerical manner. We did not see his reverence again until the morning when, as we were marching by his cottage, I caught sight of his red face peering from behind a curtain, and he favoured me with a most satanic scowl.

From Garia we marched to a wild romantic spot, called Villa Vilha, where the brigade crossed the Tagus by means of a flying bridge. During the passage of the river I somehow or other lost my balance and fell into the water.

The current was strong and I could not swim, and in all probability would have been drowned but for the gallant conduct of Corporal Phelan of the Light Company, who, throwing off his pack, plunged in to my assistance and held me up until we were picked up by a boat. Brigadier Tilson witnessed the occurrence from the bank, and was so pleased with Phelan's cool courage that he ordered him to be promoted to the rank of sergeant. On the following day we reached Castello Branca, and continuing our forward movement after a brief halt, crossed the Spanish frontier the same evening.

From the 8th to the 13th of July we were encamped in the neighbourhood of Placentia, and from thence advanced to Oropesa, where (July 20th) Sir Arthur Wellesley effected a junction with Don Gregorio de Cuesta, the Spanish generalissimo, who had with him 32,000 foot, 6,000 horse,

and forty - six guns. The Spaniards were for the most part badly armed and disciplined. and not renowned for courage. Don Gregorio was an indolent decrepit old man, with all the arrogance of the typical hidalgo; moreover, was not particularly scrupulous. After a grand review of the combined forces,



CORPORAL PHELAN RESCUES THE YOUNG ENSIGN.

marched towards Talavera-de-la Reyna, and on the 23rd July, encamped near the town.

Marshal Victor had warned Joseph Bonaparte that Madrid would probably be threatened by the allies, and the soi-disant king, alarmed for the safety of the capital, called in his detached troops, placed Marshal Jourdan in command of his army, and prepared to face the allies at Talavera.

The town of Talavera is situated on the right bank of the Tagus, embosomed in vineyards, groves and enclosures. Between the town and the Alberche (a tributary of the Tagus) is a small plain, covered with ilex, cork, and olive trees, bounded by a chain of wood-clad hills.

Beyond these hills, and separated from them by a deep rugged valley half a mile wide, is the mountain range which separates the Alberche and Tietar rivers. The allied army took up a position, extending about two miles, on commanding ground, strengthened by some field-works. Spaniards were posted at the right of the line, which rested on the town of Talavera, their front being covered by mud walls, ditches, and abattis, whilst their left was protected by a redoubt erected on a grassy mound; in rear of this redoubt the British and Spanish cavalry were posted. Of the British troops, Campbell's division felt the Spanish left; then came the guards, supported by Mackenzie; next to them were Cameron's brigade and the Germans; and in the ravine, between the hills and the mountains, were the 23rd Light Dragoons, Arentschild's German Hussars, and Bassecour's Spaniards. The 2nd division, under Sir Rowland Hill, occupied an isolated hill on the extreme left of the line, and this was deemed the key of the whole position.

The French advanced in the cool of the morning of

July 27th, and fording the Alberche, attacked Mackenzie's division, which was posted at the Casa de Salinas, and had not yet got into line. Taken completely by surprise Mackenzie retired in some disorder. and was hotly but pursued; his retreat was covered by the 45th and some companies the 60th Rifles,

led by Sir Arthur Wellesley in person; Mackenzie then got into line. In the meantime Milhaud with the French Light Cavalry made a demonstration against the Spaniards, who after firing one volley, broke their ranks and fled. There was a regular stampede! Away went Don Gregorio in his lumbering chariot, drawn by a team of mules; away went 10,000 Spanish infantry; and away went their artillery en masse! Away they all ran along the road to Oropesa, a panic-stricken, disorderly mob, spreading far and near the news that Wellesley was defeated, and the French following in hot pursuit.

After running some distance Cuesta recovered his senses and stopped his chariot, and he subsequently succeeded in bringing back some 4,000 or 5,000 of the fugitives; but this disgraceful flight nearly proved fatal, and it was with the greatest difficulty that Sir Arthur checked the French advance, and restored some order to that part of the position.

Observing the confusion that now existed on the right of the allied line, Marshal Victor conceived the idea that a smart attack upon their left, just before night-fall, might probably terminate the action, and gain him the exclusive glory of winning the day; he—without communicating with Joseph Bonaparte or Jourdan—accordingly gave orders for an assault to be made on Sir Rowland Hill's position.

It was late in the afternoon of the 27th when we reached the summit of the hill, and took up our position

with the rest of the 2nd division. Though we had heard the firing, and had seen the wounded being brought in, we had taken no part in the action during the morning and forenoon, but now momentarily expected to be attacked. The day, however, wore away, and gradually the rattle of musketry ceased, and we made up our minds that there would be no more fighting until the morrow. The sun was sinking fast and the twilight deepening into gloom, when we heard firing close to us; Sir Rowland Hill, who was talking to the colonel of the 48th (which regiment was on our left) at once rode forward. followed by the

De Brotters, Bro

SIR ROWLAND HILL RIDES DOWN THE FRENCH GRENADIER.

brigade-major, Fordyce. Hardly were they over the brow of the hill, when several shots were fired, and a riderless horse came galloping towards us.

A cry arose that the general was killed, but the next instant a hoarse voice shouted out in broken English, that it was all a mistake and that the new-comers were only a party of the German Legion. While we were wondering what had really happened, a strong column of the enemy attacked Donkin's brigade, and so vigorous was their

assault that our troops were driven back, and the 9th French regiment actually gained the summit of the hill. The 48th immediately went to the support of Donkin's brigade, and delivered a volley at almost point-blank range, which checked the exultant Frenchmen; at the same time we heard a loud cheer just below us, and the 29th led by Sir Rowland himself charged up the slope, and the enemy fled in all directions. It appeared that the general and Fordyce had ridden right into the middle of a French regiment, which, under cover of the darkness,

was silently cending the hill. Poor Fordyce was shot through the body and fell from his saddle; whilst a grenadier seized Sir Rowland's bridle and tried to make him prisoner, but the general spurring his horse, rode right over his would-be captor and galloped back. Meeting the gallant old 29th, Hill led them up the height and arrived in the nick of time to Donkin's assistance.

The light companies of the brigade were now extended along the front, and we sat down to wait for dawn of day. About midnight the Spaniards gave a false alarm and they kept up an irregular musketry fire for some time, which had the

effect of keeping us all on the qui vive, without doing much harm to the enemy.

I verily believed that Sir Arthur would have willingly exchanged the whole of Cuesta's army, for one-tenth the number of British troops; with a few exceptions, los valorosos proved the very worst allies that a general could possibly be hampered with.

When day dawned we were able to distinguish the dark masses of the enemy facing our position, their guns in

battery; the country immediately in our front was clear of wood, but very rough and broken by fissures, the bed of a small stream lay between us and our adversaries.

Suddenly a gun was fired from the centre of the French line, and ere its echoes died away, a furious cannonade was opened upon us, under cover of which the dense columns advanced to the attack. I think that the Guards were the first British troops engaged, for just as the firing commenced, their covering-sergeants took up their distance in the line, and the companies were moving up, when the enemy's shells falling thickly amongst them caused some confusion; a strong body of French infantry thinking to take the Guards at a disadvantage, rushed forward cheering loudly, but the 1st battalion of the 48th seeing their comrades' danger charged the advancing Frenchmen and

drove them off. We had just time to witness this gallant affair, when our turn came.

The regiment was in line, lying down behind the ridge of the hill; the Light Company was on the left, but, owing to the nature of the ground, a little in advance; next to us was Grenadier the Company of the Buffs. Sir Rowland Hill and his staff were close behind us. Our orders were to

arged the advancing Frenchmen and Sir Rowland was in the thick of the

CAPTURE OF THE FRENCH OFFICER BY THE LITTLE DRUMMER.

keep under cover until the enemy gained the top of the hill, then to rise, deliver a volley and give them the bayonet.

Directly after the charge of the 48th, Major Brace, our commanding officer, rode up and told young Hale to creep forward to the brow of the hill, and let him know if any of the enemy were near. The boy obeyed and came running back with the intelligence that a strong column was within fifty yards of us.

"Ready, men!" cried Major Brace; and the order was scarcely given when a shell plumped right in our midst.

"Down, Mr. Wyatt!" shouted an old sergeant, seizing my arm and dragging me to the ground; "down, my lads, down!"

I threw myself on my face, and the shell exploded; when I rose what a sad sight met my eyes! My poor

friend Hale was lying close to me, his right shoulder and arm fearfully shattered; three men were stretched beside him, mortally wounded; and the major's charger was rolling on her back in the agonies of death. Several of the Light Company were more or less injured.

The Frenchmen were upon us, and there was no time to assist our unfortunate comrades; the volley was delivered, and Major Brace, having extricated himself from his fallen horse, gave the word to charge. It was close quarters now, and no mistake! Bayonets were crossed, muskets clubbed, and many a death-blow given and received; but Bonaparte's linesmen were no match for our sturdy lads, and we drove them back over the crest of the hill.

Sir Rowland was in the thick of the fight, cheering us

when French officer levelled a pistol at him and fired, but the shot, happily, did not take effect. little drummer witnessed this attempt upon "Daddy Hill's" life, and, with a howl of rage, he threw himself upon the officer. knocked him clean off his legs, and fell sprawling on the top of him. The astonished Frenchman tried regain his feet but the boy held

him fast, and shouted lustily for assistance. I ran up and called upon the officer to surrender, which he did with an air of ill grace. Never shall I forget the poor man's disgust when he found that he had been captured by a lad not sixteen years of age!

After their unsuccessful attack the enemy retired to their former position, and we sat down amidst the dead and dying to make a frugal breakfast off such provisions as we happened to have in our haversacks.

I fear that with most of us "the cupboard was bare," but a few provident souls had some stale crusts of bread, which they generously shared with those who had none. As soon as I was assured that our assailants were in full retreat, I went to look after my brother subaltern, Charlie Hale; the poor boy was lying where he fell, but all was over, he had bled to death.

Sergeant Phelan and I carried him to a bush hard by and laid him reverently beneath it, until we could find time to bury him; and I cut off a lock of his hair, and took his watch and ring to send to his father, who had formerly served in the —th.

There was now, as if by mutual consent, a cessation of hostilities, and the tired soldiers of both armies ran down to the rivulet to quench their thirst. Upon the banks of that narrow stream French and British met in perfect amity. The contents of canteens were shared, and

Grenadiers of the Imperial Guard, Villatte's and Ruffin's divisions, and two regiments of Chasseurs-à-Cheral, advanced against our left. The 23rd Light Dragoons and 1st German Hussars went off at a canter to charge the head of these columns; we saw them advance along the ravine in splendid style, the Germans leading; but suddenly they came upon a deep, dry water-course. Colonel Arentschild halted his hussars upon the very brink, while the gallant 23rd, led by Colonel Seymour, galloped on and dashed down into the chasm.



CHARGE OF THE 23RD LIGHT DRAGOONS OVER THE RAVINE.

friendly though, most probably, unintelligible greetings exchanged, until the roll of the drum and shrill blast of the bugle recalled the men to their respective regiments, and they parted, to meet again, ere long, in mortal combat!

In the meantime the French leaders were discussing the question of resuming hostilities. Marshal Victor was all for continuing the fight, but Joseph Bonaparte and Jourdan were in favour of waiting for reinforcements. Victor overruled his colleagues, and they decided to make a general assault, from right to left, on the allied armies.

Shortly before 4 P.M., General Sebastiani with the

An involuntary cry of horror burst from our ranks, as horse and rider rolled over and over in apparently inextricable confusion; but nothing daunted by this terrible check, the troopers who were uninjured by the fall, forced their frightened horses up the opposite bank, and reformed under Major Ponsonby.

Ponsonby gave a hurried glance at his slender line. "Are you ready, 23rd!" he shouted. "Ready, Sir!" cried the dragoons, as with one voice; and placing himself at their head, Ponsonby gave the order to charge. and they thundered down upon Villatte's infantry, and

rode right through them. But as he emerged from the broken ranks of the French linesmen, Ponsonby found himself confronted by a regiment of Polish Lancers and another of Westphalian Light Horse; unable to make any head against so powerful a force of cavalry, he reluctantly gave the word to retire, and the shattered squadrons galloped back to Bassecour's division, leaving 207 officers and men on the field—victims of that glorious, but reckless, charge.

Whilst Villatte and Strolz were engaging the cavalry, Sebastiani with his Imperial Grenadiers advanced against our position, covered by a cloud of tirailleurs and by a heavy artillery fire. Silently we awaited the assault, and as the tall bearskins of these picked troops appeared above the crest of the hill, they were received with a withering fire; then cheering as only British soldiers can cheer, the men of Tilson's and Stewart's brigades charged down the slope with an impetuosity that nothing could withstand. The Imperial Grenadiers—the corps d'élite of the French army, victors in a hundred fights—found they had met their match, and facing about they fled down the hill into the valley.

The battle was won! The enemy had had enough of it, and even Victor confessed himself beaten, for his troops had been repulsed along the whole line.

Marshal Jourdan—who had from the first been opposed to giving battle at all—countermanded all further attacks, and retired his army beyond the Alberche. A desultory artillery fire was kept up for some time, but before nightfall the allies remained in undisputed possession of the field.

When the muster-roll was called, we found that the regiment had lost sixteen officers and eighty-three men killed and wounded.

The total loss of the British army was 767 killed, and 3,718 wounded and missing; the French lost between 6,000 and 7,000 men.

Napier says of this action, "Hard honest fighting distinguished the battle of Talavera, and proved the exceeding gallantry of the French and English soldiers. The latter owed much to their leaders' skill, and something to fortune; the French owed their commanders nothing; but 30,000 of their infantry vainly strove for three hours on the 28th to force 16,000 British soldiers, who were for

the most part so recently drafted from the Militia that many of them still bore the distinctions of that force on their accoutrements."

Throughout that bloody day, I had escaped without receiving a scratch, with the exception of a slight contusion from the bursting of a shell: but nevertheless the hour had come, when I was to say:

"Farewell the plumed troop, and the big wars,
That make ambition virtue! O, farewell!
The spirit-stirring drum, the ear-piercing fife,
The royal banner, and all quality,
Pride, pomp, and circumstance of glorious war!"

The fight was practically over, and many of us were engaged in alleviating, as far as possible, the sufferings of the wounded, whilst our tired soldiers rested on the hardly-held ground. I was helping a hospital-assistant to bind up a sergeant's arm that had been torn and splintered by the fragment of a shell; close to us lay a French grenadier with both his legs broken and a fearful sword-cut on his head. This wretched man—maddened by pain, thirst, and loss of blood, and therefore, I truly believe, not responsible for his actions—suddenly seized a loaded musket that lay beside him, and fired into our little group. The bullet broke my thigh-bone, I fell over on my side, and, for the first and last time in my life, fainted away.

Thanks to the kindness of General Tilson, I was not left behind at Talavera, when Sir Arthur evacuated that town and intrusted his sick and wounded to the care of that treacherous old Spaniard, Don Gregorio de Cuesta, but I was sent with a convoy of invalids to Belem, where I remained in hospital three months. At the end of that time, the surgeons pronounced me unfit for further service, and to my intense regret, I was invalided home.

I never again saw a shot fired in anger, but for many years I was on the Recruiting Staff, and finally retired from active employment in 1842, with the rank of Major. Her Gracious Majesty, Queen Victoria, shortly afterwards appointed me to be one of her "Military Knights of Windsor;" and now in comfortable quarters at the Castle, I pass a quiet, contented existence, happy in the congenial society of some old comrades, with whom I love to chat of the—

"Days when we went soldiering, a long time ago."



#### THE SERVICE CLUBS.

#### I.—THE UNITED SERVICE.

"Of all the modern schemes of man
That time has brought to bear,
A plague upon the wicked plan
That parts the wedded pair.
My wedded friends they all allow
They meet with slights and snubs,
And say, 'they have no husbands now
They're married to the clubs.'"—Hood.



JUBS, according to Addison, are "a natural and necessary offshoot of men's gregarious and social nature."

The tendency for men to associate together for some common object has existed from the earliest times, and the social confraternities in which Cicero

took delight, are but little removed from many a modern club. Societies formed for religious, political, or commercial objects are not, in the ordinary sense, clubs, unless they unite with their more serious purpose something of social recreation. "All celebrated clubs were founded on eating and drinking, which are points where most men agree, and in which the learned and the illiterate, the dull and the airy, the philosopher and the buffoon, can all of them bear a part." The old English club was defined by Dr. Johnson to be "an assembly of good fellows meeting under certain conditions," and worldly position did not in itself render a man clubable.

One of the first clubs in England was formed by Sir Walter Raleigh at the Mermaid Tavern, and to it belonged Shakespeare, Beaumont, Fletcher, Selden, Donne, and others. Ben Jonson appears to have founded a similar sodality at the Devil Tavern near Temple Bar, while many years later a Literary Club was formed by Sir Joshua Reynolds. After the Restoration the majority of the best clubs were essentially political, and of these a few still survive, such as the Cocoa Tree Club, White's, Brooke's, Arthur's, and Boodle's, though their character is, of course, much changed.

The clubs of the past have but little resemblance, either in character or comfort, to those of the Victorian era. The

tavern, chocolate, and coffee-houses have been replaced by mansions fit for a sovereign, while political and literary questions or class interests are made subservient to those of social comfort.

Though in 1840, clubs, in the modern sense of the word, had been for some years established, they were not quite recognised as social necessities, and the complaints of married ladies with marriageable daughters, and Belgravian mothers, to the effect that these institutions caused husbands to desert the domestic hearth and encouraged bachelors to remain single, expressed something of a natural feeling. Public opinion was ostentatiously on the side of the ladies and against the clubs, and to this opinion Mr. Mark Lemon responded when he wrote his successful farce of The Ladies' Club.

The modern club is thoroughly characteristic of the English people, who have a horror of indiscriminate association. It affords all the comforts of a luxurious home, and enables its members to indulge either in pleasant intercourse or bury themselves in a privacy which only can be secured in an establishment on a large scale. A witty novelist has shrewdly remarked that London clubs are after all not bad things for family men. They act as conductors to the storms usually hovering in the air: the man forced to stop at home and vent his crossness on his wife and children is a much worse animal to bear with, than the man who grumbles his way to Pall Mall, and not daring to swear at the club servants or knock about the furniture, becomes socialised into decency.

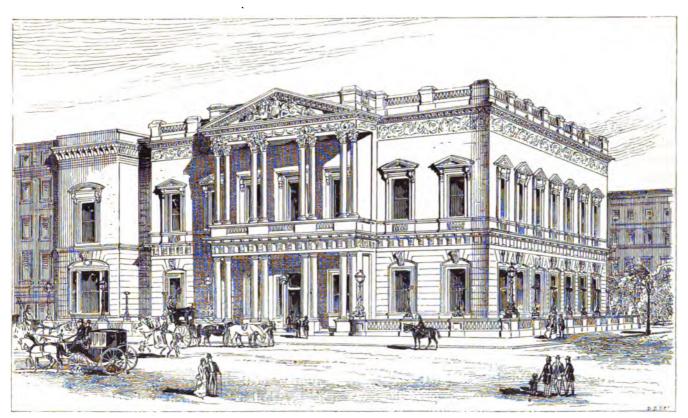
The distinction between a political and social club is now slight. The former possesses a political sub-committee, and an unusual number of blue-books and Parlia-

mentary papers may be seen in its library, but otherwise there is no marked difference between it and a literary or professional club.

Military clubs occupy a prominent position in Clubland, and bear a high character for the comfort and completeness of their internal arrangements. Soldiers are, as it may easily be supposed, the most clubable of men, and the officer abroad consoles himself for the discomfort of station life, by looking forward to the moment when he will again pass the portals of his luxurious town mansion. Some years ago the officers of the Indian army were a class apart, and congregated in snug houses where "curry" and "cheroots" were specialities. Our foreign stations are

and who in 1811 fought and won the memorable Battle of Barossa, to say nothing of his distinguished career throughout the Peninsular War. "Never," said Mr. Sheridan, "was there seated a loftier spirit in a braver heart."

Originally this club was designated the General Military Club, and was formed on May 31st, 1815, when so many of the officers of the army and navy were thrown out of commission. "Their habits," says the author of London Clubs, "from old mess-room associations being gregarious, and their reduced incomes no longer affording the luxuries of camp or barrack-room on full pay, the late Lord Lynedoch, on their position being represented to him, was led to propose some such institution as



THE UNITED SERVICE CLUB, PALL MALL.

now, however, so closely knit to England by steam-power and telegraph, that diversities of habit and thought caused by service abroad have all but disappeared, and members of the army and navy from all parts of the globe, combine in supporting the same military clubs.

We now propose to give a short detailed description, accompanied with photographs, of each of these clubs, commencing with the senior of the Service Clubs.

No record of this—one of the oldest of modern clubs—could be considered complete without some reference being made to its founder-in-chief, General Lord Lynedoch, an illustrious British general, who did not enter the army until he was in his forty-fifth year, A.D. 1790,

a mess room in peace, for the benefit of his old companions in arms. It was joined by officers of the navy on January 24th, 1816, and on February 16th following assumed the name of the "United Service Club." These officers had built for them by Sir R. Smirke a club-house at the corner of Charles Street and Regent Street, where the junior establishment of the same name now stands; but the funds soon becoming large, and the number of candidates for admission rapidly increasing, the present large and more classic edifice was erected. The present building of the "Senior" was commenced in 1826, and was designed by John Nash, and has a well-planned interior, exhibiting the architect's well-known excellence in this branch of his

profession. The principal front, facing Pall Mall, has a Roman-Doric portico, and above it a Corinthian portico with pediment. The building generally is devoid of much architectural embellishment, the decorations being simple almost to severity.

The United Service Club stands at the corner of Pall Mall, and the opening into St. James's Park. In 1858 certain alterations were made. The shop adjoining No. 117, belonging to the celebrated bootmaker Humby, was taken in, and a new wing added; the false portico on the west front, facing that of the Athenæum, was then removed.

The imposing appearance and architectural e'evation of the club contributes to lend its share of dignity and character to Clubland (Pall Mall).

The character of this club differs from the other two great military clubs-the Junior United Service, and the Army and Navy-from the circumstance that all officers to be eligible for admission must not be under the rank of commander in the navy or major in the army. The object of this rule evidently is that officers who have acquired a certain age and rank, meet here men of their own standing and tastes. To the younger officers are left the other two clubs-The Army and Navy and Junior United Service—of which we shall speak hereafter. The United Service Club is regarded as the most select establishment in London, the Athenæum ranking next. Members are not allowed to invite guests; and nothing disturbs the even tenor of this club, excepting an occasional banquet to welcome back some distinguished officer after a successful campaign. The latest of these were given in honour of Sir Garnet Wolseley on his return from Ashantee, to Sir Frederick Roberts after the Afghanistan campaign, and again to Sir Garnet Wolseley on his return from Egypt, just prior to his elevation to the peerage. The furniture and arrangements of the different apartments of the club correspond to the exterior, every convenience and luxury being placed at the disposal of the members. Among the pictures that adorn the walls of the principal rooms will be found many portraits of members who have won fame, or of paintings of celebrated battles and public events. In the entrance hall there is a colossal bust of the Duke of Wellington by Pistrucci. The grand hall is ornamented with busts of several distinguished officers, including one of Nelson by Flaxman. In the morning and coffee rooms will be found portraits of most of the late field marshals, including that of Lord Saltoun by Sir T. Lawrence, and one of Marlborough by Sir Godfrey Kneller. On the grand staircase is the statue of H.R.H. the Duke of York, portraits of Nelson and Wellington by Robinson, the Battle of Waterloo by Jones, who was complimented on its execution by the Duke on account of there not being too much smoke. And the chef d'œuvre of Clarkson Stanfield, the Battle of Trafalgar.

In the card-room will be found Lawrence's portrait of General Lord Lynedoch.

In the library there are several portraits of the sovereigns of England of the Stuart and Brunswick lines, including Queen Victoria by Sir F. Grant, and an original portrait of the late Prince Consort, by J. Lucas. The space at our disposal does not admit of a more extended notice of the pictures and other works of art. It is somewhat singular that while there are so many portraits by Sir Francis Grant, the likeness of his distinguished brother, General Sir Hope Grant, is conspicuous by its absence. Additions to the collection of pictures are constantly being made, either by the club, subscription of members, or by private donors.

The United Service is considered to be one of the most commodious, economical, and best managed of the London clubs. The moderation of charges is traceable to the number of absent members, and the practised though liberal economy of the mess table. The vulgar habit of associating the notion of gentility with expense, is invariably discountenanced at this and similar establishments.

In addition to the provision made for intellectual recreation, there is the cuisine, which is admitted to be almost perfection, presided over as it is by a committee who possess the dual qualification of savoir-faire and savoir-vivre. There is a magnificent cellar of wine filled with some of the rarest vintages, and by Rule XXXI., liquors and wines are not to be sent out of the club, everything is most jealously guarded to maintain the prestige of this important department; by this same Rule XXXI., a concession, however, is granted to the members, which evidences the epicurean feeling that exists among them, it is as follows:—"Provision of any kind is not to be brought into the club for the use of any member or members upon any account whatever, except game, venison, or turtle."

The rules of the club, both as regards its constitution and internal organisation, are drawn up in a spirit of firmness, and are calculated to maintain its dignity, honour, and comfort, and are very much after the pattern of the civil institutions of the country. The number of members, by Rule I., "shall not exceed fifteen hundred and fifty." The admission money is 40l., and the annual subscription 71. 7s. Members on foreign service may be supernumeraries and pay 1l. 1s. a year during absence. If literary men were the first to discover and recognise the advantages of club life, Addison, who may be looked upon as one of the founders of our club system, evidently anticipated that the naval and military services would not be long in following their example, and wisely adds, "When men are thus knit together by a love of society, not a spirit of faction, and do not meet to censure or annoy those that are absent, but to enjoy one another; when they are thus combined for their own improvement or to relax themselves from the business of the day, by an innocent and cheerful conversation, there may be something very useful in these institutions and establishments."

The United Service Club has ever upheld the best

traditions of the sister services, a kindly and generous feeling is at all times evinced by its members towards their less fortunate brothers in arms, while that spirit of friend-ship—the *vera amicitia* of the ancients—is its most marked characteristic.

JAMES C. DICKINSON.
Retired Staff-Surgeon.

### NOTE.

The idea of publishing a series of articles on "The Service Clubs" suggested itself to me through the receipt of a communication respecting the Junior Army and Navy Club. It then occurred to me that many officers serving

abroad would feel a pleasure in being reminded of the place where they had spent many pleasant hours in the society of old friends and acquaintances, by a drawing, and by a few remarks concerning its history, management, &c. I placed the matter in the hands of my friend Mr. Dickinson, well known to many army officers. He cordially supported my idea, and undertook the task of procuring the necessary matter for the articles. By the courtesy of the Secretary of the United Service Club, Mr. Dickinson has been enabled to obtain for me a photo of the Club. This I now reproduce. I venture to hope that my friends, and the subscribers generally, both at home and abroad, will be pleased with the result of the gallant Surgeon's labours.

EDITOR.



## ANNIVERSARIES OF BRITISH VICTORIES.

### THE DEFENCE OF JERSEY, IN 1781.

THE French, not disheartened by the failure of their attempt to capture Jersey in 1779, assembled a force of 2,000 men for the same purpose in the beginning of January 1781. The command was given to the Baron de Rullecourt, who had the experience of the former attempt, in which he had taken part, to guide him. As incentives to the utmost exertions, he was promised the rank of general, the order of St. Louis, and the post of governor of the island, if he succeeded. The expedition, on leaving the French coast, encountered a heavy storm by which the vessels were scattered and 200 soldiers drowned. But de Rullecourt, having got together about 900 men, landed with them on the night of the 5th at Grouville Bay, about three miles from St. Helier's, the capital. A party of militia, in charge of a redoubt or battery at Grouville, were surprised while asleep, and made prisoners. The French, then, leaving 120 men at Grouville, advanced in silence and darkness on St. Helier's. There, as at the landing, their presence was unexpected, and they succeeded in capturing a guard before day dawned. De Rullecourt then took Major Corlet, the deputy governor in bed, and hurried him off to the town hall where he was forced to sign a capitulation of the island. But here the successes of the French ended, for an attempt to take Elizabeth Castle was easily repelled, though Corlet was placed in front of the attacking column.

Major Pierson, of the 95th, the next senior officer present, disregarded the extorted capitulation, and collected all the

available troops near St. Helier's. When he was summoned to lay down his arms, he sent back the answer "Oui, nous porterons nos armes à la maison de la ville, mais ce sera la baionette au bout du fusil." Pierson's dispositions were soon made; he sent some of the regulars and militia to occupy positions cutting off the enemy's retreat, and about noon he marched into the town, in two columns, each preceded by a howitzer, and quickly drove the French before him into the market-place. There the possession of the island was decided in a few minutes. Pierson fell, shot through the heart, in the moment of victory, and the French commander, while holding Corlet close to him, was mortally wounded. The surviving French, having lost their leader, and also the transient advantages of the surprise, surrendered, and Corlet, having escaped unhurt, resumed his functions. In the meantime, the grenadiers of the 83rd retook the redoubt at Grouville without firing a shot.

Pierson, a very gallant and promising officer, only twentyfive years old, was deeply regretted. The fine picture by Copley, representing his death, while leading his grenadiers to victory, must be familiar to those who visit the National Gallery.

In November 1881, the honour of bearing "Jersey 1781" was conferred on the three regiments of Jersey Militia. Of the three line regiments that took part in the defence of Jersey in 1781, the 78th were afterwards made the 72nd, and the 83rd and 95th were disbanded in 1783.

E. O'CALLAGHAN.

# THE PROGRESS OF THE AFGHAN BOUNDARY COMMISSION.

BY W. SIMPSON, SPECIAL ARTIST.

### FROM SHAHRUD TO MESHED.

MESHED, 31 Oct. 1884.



we made a stay of a day or two at Shahrud, I saw something of the place, and realised more clearly the progress it is making. I was sketching in the Bazaar, and was rather troubled with a large crowd, when Mohammad Hassan

Khan, a naib of the Governor, appeared, and kept the curious mob away. After finishing my sketch, he took

through the town, to see new bazaars and new serais which had been made. These are in themselves an evidence of the coming of a better state of things. The naib took me into shop where one there was a counter, a perfectly unoriental feature, but this belonged to a Russian Armenian, who stood behind his counter in European costume; and I learned there were twenty Russians in Shahrud engaged in business. Shahrud is not far from the Caspian, and is thus on the line of commerce with Russia.

Its position will also give this place an importance, should hostilities at any time break out between Persia and the Great White Czar. A force moving from the Caspian by Astrabad to Shahrud, a distance of only about fifty miles, would hold the road we have travelled upon, and thus separate the whole of Eastern Persia from Teheran, for there is no other road, the Great Salt Desert on the south being impassable to troops. The military and also the political advantage of such a position must be at once evident to a soldier. The guard of Arabajums attended all the time the camp was

at Shahrud. Three sentries kept guard. The position of each sentry was indicated by three muskets being piled, On passing one of these sentries, we almost always found them sitting on the ground with the musket on their lap, and they suddenly jumped up on our appearance.

The first march from Shahrud is to Maiamai, a distance of forty miles. A short march of two fursachs or eight miles can be made, but that still leaves thirty-two miles; the cause of this is the absence of water. To equalise



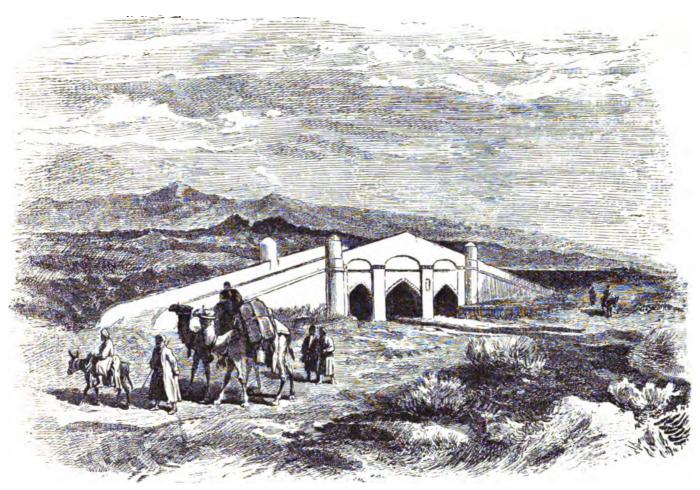
PERSIAN SENTRY.

the two marches, our camp took another route more to the left which led through hills, and brought us to the village of Armian, with a march of about twenty-seven miles. Here we encamped among gardens, a very pleasant spot, and our breakfast was eaten under the shade of a magnificent chunar tree, the circumference of which was round the root quite 100 feet, thus rivalling in size the celebrated "Grizzly Monarch," the largest of the giant trees of California. This Persian tree only rises about four or five feet from the ground,

where it spreads out into branches, each of which forms a large tree. There is a considerable space between these branches, and on this stands the tomb, or cenotaph, of a saint called Armia Paighamber, who lived no one knows how long ago. The village derives its name from him. In an out-of-the-way village such as this, where there is no news and where the Turkoman raids have been so recent, the subject naturally crops up, and the Khet Khodah said his village used to suffer very badly from them. They had to keep three men at all times on the look-out in towers

of refuge on the hills, and whenever they saw the Turkomans appear they fired their guns to give warning, and every one in the fields rushed to the single gate of the village, which is a stronghold. Should the Turkomans have been too quick, and caught any of them before entering, the prisoner's hands were tied, and he was lifted on the captor's horse and carried off. The Khet Khodah had once, when a young man, been himself a captive at Merve. These people are perfectly well aware that it has been the Russians who have changed all this, and they say, "God bless them for it."

with a pointed arch. At some date afterwards the entrance was narrowed and lowered at the top, as if danger had been feared. At a later time still, a much smaller doorway was constructed; this time with an arch so low that an ordinary sized man has to look out for his head on entering. The object of the narrow door and the low arch can be easily explained. When a raid came on, it was necessary to keep the passage open, so that those flying for safety could enter. With a large opening, the Turkomans might have made a rush and got in with the fugitives, but that would be impossible to men on horse-



PUL-I-ABRISHAM, OR BRIDGE OF THE WATER OF SILK, ON THE KAI MURA RIVER, THE BOUNDARY OF KHORASAN, PERSIA.

Maiamai, our next stage, brought us back to the main road. We came to the conclusion that the route by Armian is quite as short as the regular road, and a more pleasant one to follow. The ascent among the hills is an easy one. The walls of this place rise to a great height. As we go east, the mud walls of these fortified villages seem to get higher and stronger. We are nearing the source of danger, and hence the greater necessity for protection. At some former period the fear of the Turkomans could not have been so great as it has been lately. My reason for thinking in this way is based on the construction of the gate of Maiamai. At first it was a high gate

back when the door is not above five feet high. The lowness of the doorway is a feature of all the towns or villages in this part of Persia.

Our next march, to Miandasht, was rather a long one—about twenty-four miles—and we started about 4 A.M. The first part was an easy incline, and then we winded among a series of low hills for about eight or nine miles. This used to be a dangerous place for Kafillas, for in places there are narrow ravines overlooked by the hills, in which, if a caravan were caught there, they would be entirely at the mercy of the raiders. The spot used to be feared on this account. The ground here was covered with a large quantity of the

dried-up stems of the asafeetida plant, evidently one of the Umbeliferæ; these stems are two, three, and some four feet high, and are only used for firewood, as it requires a hotter climate to produce plants from which the drug can be procured. We at last descended from these uninteresting hill-tops, and the road passed over a desert plain to Miandasht, which is only a large serai, but a very fine one—the best we have seen. The place is large, and built of burnt brick; it is at the same time a good fort. We found accommodation in it, and did not require our tents. This serai was constructed by Hosein Kuli Khan when he was Governor-General of Khorasan, for it marks the frontier of his rule. The Cossack regiment which has been our escort

from Teheran here ended their duty upon About two miles from the serai we found our new escort drawn up on the right of the road to receive us. This turned out to be a Khorasan corps, known as Merve-Meshed Irregular Cavalry. They are dressed in the Turkoman style; it can scarcely be called "uniform," for they are not uniform; there is a general resemblance, but the colour of their coats varies in tint. This article of costume is of a purplish red, and instead of calling it a coat, it may be described as being more like a cloak or a dressinggown; it is like all Turkoman coats, wide about the arm-pits, and it descends to the knees.

Round the waist it is bound by a kummurbund; a kara-kullah, or black sheepskin hat, is the head-dress, and boots of brown leather cover the legs to the knees. For arms they have a sword and old-fashioned pistol stuck in the kummurbund, and a Berdan rifle slung on their back with a leather belt. I send you a sketch of Korban Ali Beg, a Mervee who commands the escort. He is rather better got up than his men; there are two massive silver collars, ornamented with red stones, on his horse's neck; he has no less than four pistols—one on each side of his saddle, one in a black case at his waist, and another stuck in his kummurbund. He is very unhappy about the sketch, for his "shumsheer," or sword, is not seen in it; on the morning march he comes up to me, holds up his

sword, and by signs asks me to put it in the picture. That it hangs on his left side, and cannot be seen from the point I took the sketch from, seems to be no reason to his Oriental artistic mind. I thought of putting it as if drawn and in his right hand, with which he holds a whip; as all the men use whips, I think that is a feature of their equipment not to be lost, and I do not choose to make any alteration. If the elder of these men, and some of them are far from young, were not raiders, their fathers were; and it is one of the many signs of the improved condition of the country, that such characters are now the protectors instead of being the plunderers of property. The change is significant. The Governor-General of Khorasan having given orders



MERVE ESCORT TO BRITISH COMMISSION.

that every attention was to be paid to the Afghan Frontier Commission while in his province, we had the first illustration of this at Miandasht. On approaching the serai a number of men lined the side of the road and salaamed as Sir Peter Lumsden passed; an additional mark of respect was shown by the sacrifice of a sheep. This was done on the road as we came up; the head was cut off and placed on the other side of the way, where Sir Peter had to pass between it and the bleeding body. According to Persian ideas, the person in whose honour the sheep is sacrificed should make a halt, when the animal is killed close to the horse's feet, and part of the blood

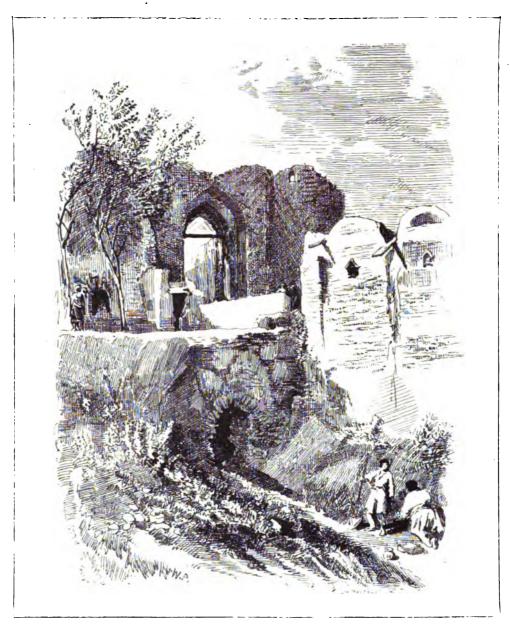
should be sprinkled on the hoofs. This part of the rite was luckily dispensed with.

Miandasht is 4,110 feet above the sea. Our next march was a descent of perhaps about 1,400 feet, which brought us down to the level of the Great Salt Desert. Our station was Abbasabad, a village with very high, strong, walls; and being on an eminence, the place has an imposing effect. From its appearance I went up to have a look at it, but it was the same inside as the other towns hereabout. The march is given as about nineteen miles.

Our next march was twenty-one miles to Mazinan, a very level road, skirting the level of the Salt Desert. At one we saw a large portion of the plain on our right of a

whitish tint, suggesting what a terrible region the Dasht-i-Kavir, which forms so much of the Persian soil, must be. About eight miles from Abbasabad is a small stream, which on the maps is dignified by the name of River; it is called the Kal Mura. Although the rule of the Governor-general of Khorasan extends to Miandasht, this is the real boundary of Khorasan. Perhaps it was found that the

a very good bridge no one uses it. We did not. During the rains, when the stream is high, it may be crossed, but on these occasions the water overflows, and the ground for some distance becomes a dangerous mass of water and mud. Mazinan seems to have been a place of some importance; there are at least the remains of two towns in ruins, and, judging by the height and thickness of the



DURWAZA NISHAPUR, THE EASTERN GATE OF SUBZAWAR.

high Dasht, or Desert, extending from Maiamai to Abbasabad, was a better Scientific Frontier than this stream. Bridges do exist in Persia, but they are rare, so it was a variety to find one on our way. Such structures here bear a close family likeness to bridges in China—that is, they rise to a great height in the centre, with a very steep ascent up and a steep descent on the other side; this one is no exception to the rule, and the result is that although house-walls, which, although all of mud or sun-dried bricks, they must have been superior places of habitation to what is usual on this line of route. After the middle of the day the thermometer rose to over 80° in our tents In the morning and evening the weather is a little cold, but nothing as yet to complain of.

Mihr was our next halting-place—said to be eighteen miles. The road was a steady ascent to about five miles from the end. Mazinan is 2,800 feet, and Mihr 3,330 feet. We have now the Sagatai range of mountains on our left. Sheep had been sacrificed at Abbasabad and Mazinan on Sir Peter's arrival, but on expressing a wish that this part of the ceremonial might be discontinued, it ceased at the latter place. At Mihr we had a row of the principal villagers who salaamed as Sir Peter came in.

The march to Sabzawar is the longest we have yet had; it is put as thirty miles. It can be cut in two by stopping at a village called Riwad, but we made no halt. We started at 2 A.M. The arrangement is to get in between nine and ten o'clock for breakfast, so the hour of the start in the morning is settled by the distance. When the sun was rising, we had more than the half of our march behind us. About four miles from Sabzawar we passed on our left hand a very beautiful brick minar, which, by order of the Shah, is being preserved in a very commendable way from decay. It belongs to the same period of architecture as those we saw at Samnan and Damghan, but it is in better preservation. It marks the site, and is all that remains, of an old city, which was called Khosrugird. The Governor of Sabzawar is Nayer-u-Dowleh, a son of Futteh Ali Shah, hence he is a Shahzadah, and uncle of the present Shah. He sent out a carriage about a couple of miles, into which Sir Peter and one or two of the Commission entered, and a procession, after Persian ideas, was formed; this passed on to the western gate of the town, then through a long covered bazaar, and out again at the eastern gate, near to which was the campingground. Sabzawar is the largest place we have seen since we left Teheran. The walls inclose a square space, which, at a guess, is perhaps half a mile on each side. In addition to the walls, there is a ditch which can be filled with water -this is a high development of military engineering for this part of the world. There are four gates, one near the centre of each side. That on the west, the one by which we entered, is the Durwaza Arokh; that on the east is the Durwaza Nishapur, as the road to that place goes out by it. This gate—Durwaza means gate—seems old, and it is pierced with cannon and musketry balls. The cannon must have been small, for the holes made by the balls are only between two and three inches in diameter; but they tell that a siege or fighting of some sort has taken place at it. The south gate is the Durwaza Sabriz, and on the north is the Durwaza Ark, from the citadel being there. As we had to make a halt of a day at Sabzawar, the Governor did not call till next morning. Being the son of Futteh Ali Shah, he cannot be a young man, but the art of dyeing hair has been carried to a great perfection in this country, and the Governor has yet a very dark beard, which preserves at least one of the appearances of youth. Sir Peter Lumsden returned the visit in the afternoon.

On leaving Sabzawar our march was to Zaffarani, a village, with the usual serai, and chapper khaneh, which are common to all stations on Persian roads. Here we

saw two arabahs, or Russian waggons, with four horses; these, we were told, are common at Meshed, and they had come thus far with pilgrims; they must have difficulties at some parts of the road, but evidently the bad bits are not insurmountable. One mark of respect from the Shah to the Afghan Frontier Commission I have not yet mentioned. that is that a Mehmandar, which word means "guest attendant," was appointed to accompany our camp Officially he has charge of the Commission. Of course he has no control over the camp, but he goes along with us to advise and give information; he has to see that we get supplies and whatever is required on the way. One Mehmandar came from Teheran to Miandasht, where another took his place, when we changed the escort. The second Mehmandar, Haji Mohammed Hosein Khan, is intelligent and well informed, and supplies information regarding places we pass on the way. He generally rides on at first in advance, and about half way we find him at his morning's devotions, where he has a carpet spread, a samovar steaming, and he invites us to stop for a few minutes and have "chai," or tea; this forms an agreeable break to the march, and Haji Mohammed then rides on with us explaining every thing we chance to see; unfortunately he only speaks Persian, but we have taught him to say "How do you do?" and he is very proud of having accomplished this first step in the English language.

Leaving Zaffarani, the road slightly ascends towards a pass which we entered, called Dhana-i-Sabzawar, or Mouth of Sabzawar, as it debouches on the plain where that town stands. From this the road ascends among the tops of low hills all the way to Shorab, the next station, which of course stands high.

From Shorab our way began among the low hills of yesterday's march, but soon descended into the great valley of Nishapur. Before us was a range of hills, which on the official map are called the Binalud Kuh, but the name does not seem to be well known; the people of the locality are more familiar with them as the Nishapur Kuh, or the Ferosé Kuh, from the Turquoise mines in them; we had a ride across the plain of at least a dozen miles to Nishapur, which lies not far from the base of the hills. This valley is fertile and well cultivated, 12,000 karaizes are said to be in the valley, but this looks like a fabulous number; certainly we saw plenty of these irrigation works, and some of the holes by which they are made and kept in repair are most dangerous places, for many of the openings are close to, and some even encroach upon the edge of the road. They are deep ugly chasms, with no protection around them, and we often express wonder as to whether accidents from people falling down are frequent or not. About two miles from Nishapur a few sowars of a local cavalry corps were waiting to receive us. The horses had pieces of red cloth which covered their necks, and partly hung over the horse's head; their muskets were in covers of

the same colour, and slung on their backs. With them was their commandant, and a Chobdar,—a man with a silver mace,-who called out as we went along to clear the road for the great people who were coming. Nearer the town were more officials, and a carriage drawn by two white horses was waiting; Sir Peter dismounted, and as I chanced to be the only one with him at the moment, he insisted that I should also take a place in the vehicle, but it was not much above the size of a Bath-chair, hence the entry into the ancient city of Nishapur might be described as having more of honour than comfort in it. The way to the camp passed along the walls of the place, which are in a ruinous state, but they had been of rather an elaborate kind, for there was not only a ditch, and a deep one too, but it had a covered way between it and the wall—a chemin de ronde the French would call it. The defences inclose a very large space, but we were told that the town has decayed very much during the last twenty years. To the south there are the remains of an older Nishapur; they are about two miles away, and are only a series of mounds left by the mud walls; they show yet the size of the former town. Close to them there yet remains the tomb of Omar Khayam, tent-maker and poet, whose works have lately become known to the public of Europe; he lived at the time of Hassan Subbagh, the "Old Man of the Mountain,"

and founder of the Assassins. That was as far back as the time of the first crusade.

The march to Kadamgah is called fourteen miles, but it may be sixteen. There are some splendid old pine-trees here belonging to a shrine which is 400 years old, over a mark of the Prophet's foot.

The next march, to Sharifabad, turned out to be a very long one, over high ground among bare hills. Sharifabad is said to be 4,500 feet high; we found it cold.

The arrival of Sir Peter Lumsden at Meshed I shall reserve till my next letter, which will probably be from Sharrkhs.

LIST OF MARCHES FROM TEHERAN TO MESHED.

Time.													Time.		
Teheran to-						Teheran to—			Miles.			hrs. min.			
Dowlutabad .		5			_	-	Maiamai .			12			3	45	
Kabud Gumbai	۲.	173			5	_	Miandasht			24			5	45	
Aiwan-i-Kaif.		20			5	_	Abbasabad			19			_	_	
Kishlak							Mazinan .			21			5	45	
Deh Nemek .							Mihr			20			5	30	
Lasgird		24			5	45	Sabzawar .			30			8	30	
Samnan							Zaffarani .			21			5	30	
Ahawan		22			5	45	Shorab			16			4	_	
Gushih		20			5	-	Nishapur .			22		٠	6	_	
Damghan							Kadamgah								
Deh Mullah .							Sharifabad								
Shahrud							Meshed .								
Armian								Ť	•		·	·			

This list must be looked upon as only approximately correct, for there are no milestones, and the Persian fursach, which is roughly estimated at four miles, is only a guess by those who have travelled. The time given is also a very rough measure, for it does not always include stoppages.

# ANNIVERSARIES OF BRITISH VICTORIES.

#### THE ACTION AT LUGO, IN 1809.

DURING Sir John Moore's advance into the north of Spain in 1808, and the subsequent retreat to Corunna, all the regiments of his two cavalry brigades had opportunities of earning distinction, and of proving their superiority to the French cavalry both in daring and efficiency. The 7th Hussars were several times engaged with success, the 10th Hussars took the chief part in the action at Benevente, the 15th Hussars completely routed a much larger number at Sahagun, the 18th Hussars signalised themselves at Rueda Mayorga, and other places, and the 3rd Hussars of the German Legion were worthy associates of the British regiments named.

The British infantry were not engaged in the advance, and afterwards their fighting was restricted to repelling attacks. The misconduct and laxity of discipline in many regiments during the retreat evoked the severe and repeated censure of the commander; but the near approach of the enemy, and the prospect of a battle, were more efficacious in restoring order than the reproaches of the general.

On the 7th of January 1809, Moore halted in a strong position near Lugo, to give his weary soldiers a day's rest, and to accept battle if the enemy attacked him. About midday the French advanced and began a cannonade. Shortly after, a false attack was made on the British right

while the real attempt to turn the position was made on the left, where Major-General Leith's brigade (the 51st, 59th, and 76th) was posted. The French came on in large numbers, and forced back some companies of the 76th which were in advance. Sir John Moore rode up at the critical moment. He found his old regiment, the 51st, in which he had served as ensign, major, and lieut-colonel, hardly pressed. In a few animating words, he reminded them that he was once their colonel, and told them how much he expected from them. No more was required; the 51st and 76th repulsed the attack before any other regiments could come to their aid. In this brief but sharp encounter, there were many casualties. The brigademajor, Captain Roberts of the 51st, was wounded in two places, and he and others behaved with distinguished gallantry. After this repulse, the French returned to the position they occupied in the morning. Moore kept his troops on the same ground till the evening of the 8th, when, as there were no indications of another attack, and his provisions were nearly exhausted, he resumed his march to Corunna. There, on the 18th, he fell, when he had gained the victory which secured the unmolested embarkation of his army.

E. O'CALLAGHAN.

## TOM HOLDING'S BET.

#### A TALE OF MILITARY LIFE.

BY MAJOR W. J. ELLIOTT.



I was guest-night at our mess, and, on the whole, a right good set of fellows were seated at the long dinner-table of the mess-room. The "dad," as we used to call our grey-headed colonel, was at the table's head, grimly smiling at the lively sallies made by many of

the youngsters on his right and left.

A new captain had just joined us. He was a quietlooking man of about thirty years of age, with blue eyes set rather deeply under dark and well-defined eyebrows, and with an expression of firmness about a mouth shaded by a dark-brown moustache, carefully trimmed. His nose was slightly aquiline, his features regular and pleasing.

Altogether, his face was decidedly good-looking, without being frank and open in expression. His figure was slight, though firmly knit together. His manner was remarkably calm, yet decisive. The character which preceded him in the regiment was, that he was an excellent whist player, that he possessed a cool head at critical moments, and was generally thought to be up to a move or two, and not to be easily taken in. Beyond these items of information, nothing was known in our regiment concerning his antecedents. His name was Davenport. On this occasion he was seated beside one of our most popular lieutenants, a young Yorkshireman,

whose sole fault was a fondness for bragging of his athletic accomplishments.

As usual, whenever Tom Holding put on board two or three glasses of generous wine, his tongue got loose, and he began to talk of his physical prowess. He had found a ready listener this evening in a young lieutenant from another regiment who was seated on his left, and who certainly did look surprised at some of the Yorkshireman's recitals. The lieutenant warmly expressed his most undoubted admiration respecting all the statements that were poured into his ears. Tom, finding he had by his side a young gull who would swallow no end of stuffing, grew bolder in his assertions, and drew largely upon his imagination under the influence of the champagne as it was passed along.

The quiet-looking captain from time to time eyed the big Yorkshireman rather keenly, and occasionally ventured a remark of a nature to encourage him to go on still further in his narrations of personal ability to perform all sorts of powerful things.

Our grave old "dad," the colonel, frequently surveyed the new captain, not suspiciously, but with evident interest. The gallant old boy could see that Tom was going it

tremendously in the way of boast with the juvenile lieutenant on his left, and perceived that the new captain was listening attentively to all the conversation that passed around him. The colonel did not at first let what was evolving in his mind be known by any remark. He turned at last to our adjutant, and said in a low tone,

"Our new comer, Davenport, seems a cool sort of fellow. He is taking stock of Holding, and will teach him a lesson before the evening is out, if he is not very careful."

"Yes," was the reply,
"Davenport does not
know Holding so well as
we do, and, of course,
don't chaff him about his

THE BOAST.

boasting peculiarities. I should not be at all surprised if our new captain were making up his mind to take Tom down a bit, and if he succeeds in doing so, it will do the young fellow a world of good."

"Well," said the colonel, smiling, "I fancy it wouldn't do him any harm, and as you suggest by your remark, it might stop a good deal of Holding's brag in future, and make him a more modest and unassuming fellow. There's a good deal of excellent stuff in Holding; he only wants

the curb on whenever he gets on his favourite topic of athletics."

Tom's voice grew louder and yet more strident, and it happened that during a slight lull in the conversation around the colonel, he heard Davenport suddenly say to Tom in firm yet quiet tones,

"You certainly have done some marvellous things."

"I have beaten our regimental best on record all round," said Tom, in his usual strain.

"So I should imagine, and I quite believe you," said Davenport, "but there is one feat that you have

never yet accomplished, and I don't think you can do it."

"What's that?" said Tom.

"Well," replied Davenport, "you can't drink a quart of porter, and run twice round the barrack square in ten minutes."

"I can't?" said Tom.

"No," was the reply.

"Ha! ha! you're joking," laughed Tom.

"No, I'm not," said Davenport.
"I say you can't do it." The champagne was now well up in Tom's cranium, and he had grown a little heated.

"I'll bet you twenty to one in sovs I do it," said he. "I'd advise suppose there will be any on it but a squad or two at dismounted drill or sword exercise."

"All right," said Tom, "I'll be ready for the affair tomorrow at two o'clock punctually."

At the termination of this conversation, the colonel again remarked to the officer on his left, "I'm afraid our young friend Holding is going to be had this time. Davenport is too cool a hand for the youth, I'm sure."

"We'll see some fun out of this, I think," said the officer, "or I'm much mistaken; I shall attend to see the event pulled off."



THE COLLAPSE.

you to be careful how you take me, it's the easiest of wins; why, I'll do it, and have three or four minutes to spare."

"Are you in earnest with your bet?" asked Davenport.

"Certainly, never more so," replied Tom.

"Then I'll take you," said the quiet-looking captain.

"When shall the event come off?" inquired Tom.

"To-morrow, at two, if that will suit you," said the captain. "Our morning's regimental drill will be over, and the parade ground will be pretty clear; for I don't

On the retirement of the general body of officers to the smoking - room, the subject of Holding's bet was freely spoken of, and all who would be off duty on the morrow resolved to be present on the parade ground at two o'clock to the tick.

The appointed time had nearly arrived on the following day, and with this, a knot of officers who were grouped at the extreme end of barrack the square. Amongst them was Davenport, watch in hand. All were in waiting for Holding's pearance.

Soon the big

Yorkshireman came out of his quarters clad in white flannels, and with his running shoes on, all en regle. He looked radiantly confident as he drew near to the assembled party. Sundry small bets upon the affair took place between those present. The odds were pretty evenly distributed. Many were sure that Tom would win. These were the youngsters of the regiment. The oldest officers seemed doubtful as to whether there had not been some scheme devised by Davenport, through which Tom would come to

grief. Davenport was, as usual, quiet, cool, and undemonstrative.

Just before the barrack clock struck the hour, Tom turned towards Davenport, and said,

"I say, no pranks with the porter, you know."

Tom had begun to have a vague perception that the only way by which he might lose his bet would be through some disagreeable circumstance connected with the fluid he was to swallow before starting on his run.

"Oh," said Davenport, "if you have any doubt about the porter, we'll call up one of the men and send him to the canteen for it."

"Agreed," said Tom, and one of the troopers was accordingly directed to step forward and wait for orders.

As the stroke of two drew near, the man was requested to run to the canteen and ask for a pot of porter for Captain Davenport, and be quick in getting it. The man sped away, and in a minute or two returned with a quart pot filled with the desired liquid, topped by a fine frothy head.

Tom Holding took his position for a start. The knot of officers opened out right and left. Davenport stood ready to give the signal. The man with the porter stood by his side. The barrack clock struck two.

"Go!" cried Captain Davenport.

Tom snatched up the quart of porter from the hand of the trooper, and took a long and heavy pull at its contents. He drew a deep breath, and again drank; another inspiration and a last pull at the porter were taken, he then threw down the quart pot and went away at a slashing pace.

Once round the square the gallant Tom careered at his highest speed, and as he came towards his brother officers full of running, his face assumed a triumphant expression. He glanced at the clock as he passed the spectators of his efforts. He had so far well beaten the time at his command, and had still plenty of reserve strength with which to complete the second round with ease within the given period.

Again Tom nearly covered three-fourths of the allotted course. He suddenly faltered in his steps, and swerved aside.

"By Jove, he's done!" rang out from all who watched him.

"No he's not, he's on again!" was the excited remark, as Tom recovered himself, and went on with his running. Then his observers saw the burly form of Tom Holding stop dead and stagger towards a lamp post in front of the main guard.

All the troopers of the guard were out to see the race. Two of these were seen by the officers at the end of the parade ground to run up to the unfortunate Tom, and lead him towards his quarters near. The sound of a tremendous peal of laughter floated upon the air and reached the lieutenant as he went up the steps leading to his rooms. His head drooped upon his breast in agony more physical than mental.

Captain Davenport quietly, and without the slightest

observation, put his watch into the pocket of his patrol jacket, and walked away. The rest of the officers dispersed.

Many were the speculations as to the cause of the burly Yorkshireman's sudden collapse when he seemed so full of winning power. Captain Davenport was perfectly reticent upon the subject. All that became subsequently known, was, that he received a cheque from Tom for twenty pounds, which he at once handed over to the colonel for the benefit of the wives and children of the non-commissioned officers and troopers who would be left behind on the regiment's departure for India in the ensuing relief season.

Now, a very peculiar circumstance occurred when the trooper reached the canteen bar, who was sent to procure the porter. Captain Davenport's regimental servant was standing at the bar, having before him a quart of porter that he had just ordered for his own consumption. The trooper ran into the canteen, and hastily demanded to be served with the utmost despatch. Captain Davenport's servant, with the greatest eagerness, instantly handed his quart to the trooper, observing that the beer had but just been drawn, and that he had "niver so much as put his lips to it." He took the coppers for payment from the trooper's hand.

"Run like the devil," said he, "for the clock's just on the stroke of two, and you've not a second to spare."

The trooper doubled off with the porter. The servant with a sinister look upon his countenance, ordered another quart of black strap, and put it to his mouth to drink.

"Luck to the master," said the man, as with a broad grin upon his face, he rapidly drained the pewter.

Whether this servant was at the canteen bar by accident or design at this particular moment, was never made particularly clear.

Tom Holding had lost his wager. Captain Davenport had handed the amount of it over for the benefit of the regimental charity, so that he gained nothing by the transaction but a most decided pull over Tom, who appeared on parade the next day looking considerably crestfallen. He took with a show of cheerfulness the unmerciful chaff to which he was immediately subjected. He regarded Captain Davenport with looks that were opposite to friendly. He had a sort of perception that he had been regularly sold, but how, he felt he would never be able to bring to light.

After this episode, whenever Tom began his boasts about his feats of strength, "How about that bet to run round the barrack square?" was a question which completely stopped his narrations. He never quite forgave Captain Davenport his little victory.

Tom is a retired lieutenant-colonel and a country squire now, and a rattling good one, too. A kinder landlord does not exist in the whole of Yorkshire county. He gives great encouragement to sport and pastimes. •

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THE VISCOUNTESS STRANGFORD AND BARONESS PENSHURST.

Machine & Macdonal LLuth's London

## THE DECORATION OF "THE ROYAL RED CROSS."

#### THE VISCOUNTESS STRANGFORD AND BARONESS PENSHURST.



HE Queen and Princesses of our Royal Family wearing the brilliant decoration of the Royal Red Cross having been duly portrayed in the preceding numbers of The Illustrated Naval and Military Mugazine, the same artist has now the honour of limning the features of the

first noblewoman outside the Royal Circle upon whom Her Majesty conferred this coveted distinction.

Quick to notice acts of heroic devotion on the part of all classes of her subjects, the Queen could not fail to have been particularly gracious in decorating Lady Strangford with the Royal Red Cross in token of her admiration of a noble life given up to the alleviation of suffering in many lands, and on not a few battle-fields.

Full of thrilling incidents as the most moving romance, has been the career of Lady Strangford. Her father, Admiral Sir Francis Beaufort, was one of those men of vast knowledge and work, whose names are too little known during their lifetime, and too soon forgotten when gone. After his death she travelled for three years, becoming thoroughly acquainted with Egypt, Syria, and the Levant; and published an account of her travels (Egyptian Sepulchres and Syriun Shrines), of which two large editions were sold in a few weeks. On coming home, she was married to Lord Strangford on the 6th of February, 1862. Thenceforward all her interest centred in the Ottoman Empire, in which Viscount Strangford had passed most of his life, and which still occupied his thoughts and his trenchant pen. Too weak in health to travel much himself, he sent his young wife on a rough journey through Albania and Montenegro, saying he knew no one else who would bring him the information he wanted with so much accuracy and so little prejudice. This journey resulted also in a successful book (The Eastern Shores of the Adriatic). Their happy married life, passed chiefly on the Continent, did not complete seven years.

Recovering from a long illness, which prostrated her on the death of her husband, Lady Strangford benevolently devoted herself to nursing; and went through a course of hospital training, besides much active work among the poor. It was she who conceived the excellent idea of district nurses for the sick poor, and herself began the

organisation of the plan with the help of the Order of St. John of Jerusalem; but not being able to command sufficient funds for its development, the work was taken up by the Duke of Westminster, and grew into the Metropolitan and National Nursing Association.

The love of the East, however, re-asserted itself strongly in Lady Strangford. She went back to Constantinople in 1875, to be kindly welcomed by many, and especially by the Bulgars—the nationality so persistently brought into notice by Lord Strangford. In the spring of '76 these poor people broke into insurrection. In reply to an ardent appeal from the Right Honourable W. E. Forster, Lady Strangford, although but just recovered from scarlet fever, volunteered her services to carry relief to the wretched Throughout the five months of 1876-77, she mercifully laboured among them, travelling on horseback night and day through the deep snow, herself undergoing the utmost hardships, organising all over the country centres of relief to provide clothing, shelter, and employment, besides establishing six temporary hospitals with doctors and nurses. And all the accounts and arrangements had to be undertaken by herself, with scarcely any assistance.

Worn out at last, Lady Strangford returned to England at the end of May, but only to leave again after a short rest for the same country, then ravaged by the Russo-Turkish war. The Red Cross and the Stafford House Societies were already in the field with ambulance hospitals. But they had no nurses; and far more succour was urgently needed. After establishing a hospital at Adrianople, a larger one was fixed at Sofia, where, after great suffering and fatigue, Lady Strangford with all her staff and over 300 wounded Turkish soldiers, were made prisoners by the Russians in January, and were detained there till the declaration of peace.

Returning to Constantinople, Lady Strangford set up a hospital for the Turkish sick and wounded, and another for the children of the miserable refugees whom she found dying by hundreds, and maintained these till the end of the autumn. On these good works nearly 34,000l. passed through her ladyship's hands from public subscription. A name so well known in the East was sure to be appealed

to by all in distress, and the starving survivors of the great famine in Kurdistan and Asia Minor implored her aid. During '81 and '82, she was incessantly occupied in the distribution of relief through carefully chosen agents.

Once more responding to the call of the sick and suffering, Lady Strangford yielded to the request of a small committee, and left her home for Egypt, where she arrived on the day of the battle of Tel-el-Kebir. Her ladyship there established a temporary hospital in the house of Arabi, which did excellent service for both English and Arabs; and as there was no European hospital of any kind in Cairo, it was necessary to make it a permanent one. The Queen took a lively interest in its establishment, and, at the request of the Khedive, Her Majesty gave her name to it. Lady Strangford came to England, having left the Victoria Hospital thoroughly well established. That beneficent institution, however, shared in the general muddle of everything in Egypt, and was suppressed eighteen months later by the authorities then in office.

At home, particularly at this distressful Christmas, there are as many stricken in the Battle of Life—as many hungry and starving families of mechanics and labourers to relieve, as there were in the encrimsoned lands Lady

Strangford visited as a Sister of Mercy in war-time. Peace has its direful defeats as well as its triumphant victories. In the self-sacrificing endeavour to mitigate the human suffering consequent on such industrial crisises, Lady Strangford and her co-workers have quietly but effectively laboured. A noblewoman in the highest sense of the term, Lady Strangford is known to have zealously co-operated with another benevolent lady, Mrs. E. L. Blanchard, in promoting emigration to our Colonies. The amiable wife of that distinguished theatrical critic and accomplished gentleman, Mr. E. L. Blanchard, this lady has given up many years of her life to the praiseworthy task of securing happy homes for English girls in Australia and New Quite recently Lady Strangford has borne witness in public to the noble efforts of Mrs. Blanchard in this direction; and earnestly urged that subscriptions in aid of this admirable work, should be sent to the Hon. Secretary of the Loan Fund and Colonial Emigration Home, 13, Dorset Street, W. It is thus At Home as well as Abroad that ladies of the Royal Red Cross laudably labour in the true spirit of the seasonable motto of this beautiful decoration, "Faith, Hope and Charity."

JOHN LATEY, JUN.

## ANNIVERSARIES OF BRITISH VICTORIES.

#### THE ACTION OF CORYGAUM, IN 1818.

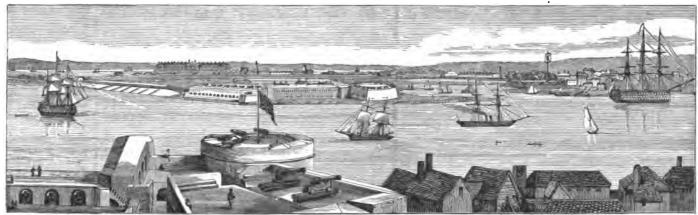
On the last evening of 1817, a small force, commanded by Captain Staunton of the 1st Bombay N.I., marched from Seroor to Poonah. It comprised an officer and twenty-six men of the Bombay Artillery, with two guns; the 2nd Battalion 1st Bombay N.I. [now 2nd N.I.], about 500 strong; and 250 "Auxiliary Horse."

Early in the morning of the 1st of January 1818, Staunton's progress was stopped, when he was near the walled village of Corygaum, by the appearance in his front of a large mass of the Peishwah's troops, estimated at 20,000 cavalry and 800 infantry. He succeeded in taking part of the village (its name is spelled in half a dozen ways, from which my readers may choose for themselves), but not in time to prevent the Arabs of the enemy's infantry from occupying the other part. A continued struggle was maintained till nine in the evening, when the Peishwah's hordes, having failed to overpower or exterminate the comparatively small British force, finally retired. The Arabs gained momentary possession of one of the guns, but it was recovered under circumstances that call for special notice. Lieutenant Patterson, who was six feet seven inches in height, and of strength and courage in proportion to his towering stature, lay shot through the body and mortally wounded; but when he heard that the gun had been captured, he rose to his feet once more. Seizing a musket near the muzzle with both hands, he used it with such effect that the Arabs recoiled beyond the reach of his terrible blows, leaving him in possession of the gun, and surrounded by those whom he had struck down in his expiring efforts. Of eight European officers, two were killed and three wounded (one mortally); of twenty-six artillerymen, twelve were killed and eight wounded; of the 2nd Battalion 1st N.I., fifty were killed and 105 wounded; and of the Horse sixty-two were killed and thirty-four wounded or missing. The enemy's loss was estimated at 500 or 600.

After so severe a conflict and such heavy losses, and with men who had had no food for two days, the march towards Poonah was deemed impracticable, and on the 2nd of January, Staunton marched back, unassailed, to Server

The name of "Corygaum" is borne by the 2nd Bombay N.I., and Poonah Horse. The anniversaries of the year may worthily begin with that of an action in which Bombay Sepoys emulated the heroism of their British leaders and comrades on the 1st of January 1818.

E. O'CALLAGHAN.



BLOCKHOUSE FORT AND HASLAR HOSPITAL

THE KING'S BASTION.
PORTSMOUTH HARBOUR.

THE "ST. VINCENT."

## OLD AND NEW PORTSMOUTH.



IAT is the name of those new barracks?"

I asked of one of the "oldest inhabitants"
of Portsmouth the other day, pointing to
an immense pile of red brick buildings
facing the King's Road. "Can't tell ye!"
"What site do they occupy?" "Dunno."

"But surely—" "I tell ye I dunno, they 'as so altered the old place that I can't tell sometimes where I am, and I'se lived here goin' on fifty year." Making every allowance for the old man's real or assumed ignorance, accompanied as his answers were by the slightest soupcon of irritation, I remained quiescent. I too had my feelings on the same matter. New Portsmouth as she stands pronounced to-day, is not the Portsmouth of my early youth; progress has been too much for the old town. So sudden indeed has been the grasp of vandalism, that in a few short years all the romantic spots associated with the wondering eyes of my youth have been for ever obliterated. Where is the old Mill-dam, across which many a time and oft I have wandered—there to watch the tiny rippling waves of green sea which always made their way into the very heart of the grim old town? Where are the Ramparts, surmounted as they were by murderous-looking guns that never fired a shot—at least in defence of Portsmouth? Those long, verdant lines of defences, with nothing to defend, were always a source of deepest interest to my young eyes Calm and beautiful they lay with the dewdrops glistening on them in the morning's sunlight, and with scarcely a sound to disturb them, save the gun-fire which called alike civilians and military to their labour. Where, too, are the old sally-ports, which in my boyish imagination I have invested with scenes of direct bloodshed, and, in fancy, have repelled mighty hosts of invaders? Those dear old drawbridges, too, which never were drawn up, but constantly spanned the long vista of moats containing, at least a foot and a-half of dirty, slimy water, impregnated

with the faint odours of decomposing seaweed? Where are they? "Goned afay in de ewigkeit," and Portsmouth (old Portsmouth that was) of to-day is new. In the place of the quiet sleepy sentinels who were wont to watch for an enemy that never came, and tread their measured walk high upon the mullioned and battlemented ramparts, there is heard now the everlasting tinkle-tinkle of very modern tramway-car bells, and the shrieking whistle of endless locomotives as they ruthlessly tear their way over these time-honoured spots. The huge earthworks forming the Mill-dam have been pitched bodily into the moat, a process of "levelling up" resulting in an "officers" and "men's" recreation-ground, whilst the guns whose menacing throats pointed northwards, have been swept away to make room for a palatial building for the better accommodation of the parochial governing bodies to fire upon each other their thundering cannons of rhetoric. From the earliest known period, historians and antiquarians speak of Portsmouth, the magnificent harbour, supposed to be the largest in the world, always having possessed a great charm for our warlike ancestors. This charm may be taken as still existing, if one may judge by the enormous flotilla of every kind of craft now to be seen. Proportionately as ages have grown, the magnitude of this splendid shelter has increased. War-ships and troop-ships (ancient and modern), gunboats, torpedo-boats, steam-ships, sailing-ships, and every conceivable sort of floating craft, are here in heterogeneous hosts, whilst the facilities for building them are boundless. In mediæval times, when Portsmouth had not the importance with which to-day it is invested, the place was always a favourite for either the landing or embarkation of our kings and great admirals. Much, however, of its popularity in this regard has departed, probably owing to these piping times of peace. Whatever the cause, Portsmouth of the present day certainly does not display any of those scenes of excitement of which so many pages of



THE "VICTORY."

FIGATING BRIDGE

THE "EXCELLENT."
PORTSEA.

DOOKYARD.

PORTSDOWN HILL

history have been made up. Divested of all her frowning ramparts, inaccessible moats, sally-ports, and drawbridges, the old town of Portsmouth proper, may now be regarded with the most lack-lustre eye. The busy hum of workaday life has sapped up and absorbed all its romantic associations. There is much to say in favour of this wondrous change, there is still much to interest the eye, there are greater facilities for viewing the historical port, there is also a complete awakening from the lethargic somnolence which for ages prevailed here, and which still existed only a few short years ago. The marvellous growth of Southsea during these days of "seasonable visitors" is no doubt the primary lever which has lifted the dreamy old apot from its vegetating existence into the liveliest animation. Speculating builders were never notorious for

once more the old battlemented lines, the steady but sure invasion of the demon builder can be marked as emanating from Southsea. In 1372 Portsmouth was captured and burnt by the French, since which time the place has held its own. It has, however, once more fallen, and this time at the hands of an enemy more implacable than the Segontiaci, Belgæ, Saxons, Romans, or Gauls. When the gentlemen of the scaffold-pole, hod, and trowel, once lay violent hands upon the most sacred shrine, it falls never to rise again.

What would Porta, Magla, or Bleda, now say to their whilom possession! Even the Norsemen, who were never famous for shedding useless tears, would weep their very eyes out, were they now to contemplate the scene of their many deadly struggles.



SOUTHSEA CASTLE AND PIER IN DISTANCE

Southsea and Grand Parade.

SPITHEAD.

sentiment. Dire enemies as they are to archæologists and all true lovers of monumental insignia, they have thrust their hydra heads right into the heart of the ancient borough, and left scarcely a wrack of antiquity behind. Far as the eye can reach in wistfully watching to localise

In 1522 Edward VI. landed here and gave the following description of Portsmouth: "The bulwarks are chargeable, massy, and ramparted; but ill-fashioned, set in remote places, and the town spread about in comparison of what it ought to be, and within the wall

was much vacant room." Were that critical monarch to revisit modern Portsmouth he would have no cause to complain of "much vacant room within the walls;" his kingly eyes would start from their spheres in amazement on noting how much the "vacant room" was conspicuous by its absence. Had the Duke of Buckingham who, in 1628, was murdered here, postponed his visit to the present year of grace 1884, he might have laughed to scorn the machinations of the fanatic Felton and gone on his way rejoicing. There is no "vacant room" left for committing murder, in the lacadasiacal fashion perpetrated by that gentleman. The old house in High Street in which the dire deed was consummated is so "crowded in," that without the aid of wings the murderer's escape would now be almost impossible. Doubtless the speculative builder with his usual forethought has taken all these contingencies into consideration, and as far as possible to prevent a recurrence of such treacherous proceedings has done his doleful best to obviate their repetition. I am poor in thanks, but I thank him! In 1548, says Leland the antiquary, the town was bare, and little occupied in times of peace. Nous avons changé tout ccla. Three hundred and thirty-six years later on, Leland would say that Portsmouth is not "bare," and is very much occupied in times of peace.

- Fortunately the powers that "were," secured from the hands of my friend of the scaffold-pole that beautiful space called Southsea Common. This is now and will remain for ever a lasting monument to the solicitude with which all our governments endeavour to protect the health of the people—when they will pay for it themselves. It is not a very far cry from Southsea Common to the Hard at Portsea; and here again, progress has been running rampant. The magnificent view of the harbour hitherto presented at this spot, is much marred by the introduction of a viaduct which stretches across the whole length of the Hard and nearly parallel with it, thus shutting out one of the finest sights in England. Hideous railway carriages too, are continually left to adorn its summit, and materially assist in the objectionable obstruction. Spite of this "improvement," however, Nelson's old Victory looks smiling as of yore; so also does the Admiral's flag-ship the Duke of Wellington. In close companionship rides the training-ship for boys, the St. Vincent; and one cannot help, while admiring this noble vessel and her noble cause, indulging in some sad reflections as to the fate of another training-ship, whose end struck a chord of sorrow

throughout the kingdom. The ill-fated Eurydice, which has contributed to our navy many specimens of the dauntless British sailor, is no more. Raised from the tomb of waters in which for several months she lay buried, she was towed into Portsmouth dockyard, condemned, broken up, and sold by public auction. Her provisions were taken to sea and sunk. Her timbers are distributed everywhere, and there is scarcely a house in the neighbourhood which does not possess some article, in the shape of a cross, an anchor, a snuff-box, and so forth, made from a portion of the unfortunate ship. It is whispered that there are in existence sufficient souvenirs to have built three or four Eurydices. Be that as it may, there is nought left of the once famous training-vessel beyond a rusty gun or two, a rusty anchor or two, a very small portion of her ribs in the block mills, and the million and one relics before mentioned.

One of the newest things in the will cown of New Portsmouth is the Theatre Royal. This is a fine building and will vie with any of the "houses" in the west end of London. "Sadler's Wells Theatre at the White Swan Inn" was the first theatre built on this spot by a successful turnpike-keeper, but the "spec" proved a dismal failure, in consequence, so they say, of the actors being alarmed by constantly finding one more in the ballet than belonged to the company!

While Stephen Kemble was manager of this house, a sailor applied to him on one of the nights when there was no performance, and entreated him to open the theatre. "What will be the expense if you open the house for me to-night?" asked he. "It must be opened to-night, for tomorrow I leave for India, and God knows if ever I shall see a play again." "I will represent a tragedy for five guineas said the manager, hesitatingly. "Agreed!" cried the sailor, "I will give it upon this condition, that you let nobody in the theatre but myself." The manager acquiesced, and asked the sailor what tragedy he would prefer. "Richard the Third," joyfully replied the tar. The house was accordingly prepared, the actors attended, and the sailor took his seat in the front row of the pit. Mr. Kemble himself played Richard. The play was represented throughout, for the sailor brought a book with him and was very attentive, sometimes applauding, often laughing, but always on the look-out lest some other auditors might intrude upon his enjoyment. He retired perfectly satisfied, and cordially thanked the manager for complying with his THOMAS GREGORY. request.



### MILITARY BIOGRAPHY.

### LIEUT. GENERAL SIR ARCHIBALD ALISON, BART., K.C.B.



Amongst the famous historians in the immediate past who have recorded faithfully and graphically the annals of nations, to wit, Hume and Smollett, Gibbon and Macaulay there has been reserved a niche in that Temple of Fame, wherein the above worthies now cease from their labours while their works follow them; and that niche is now occupied by the late Sir Archibald Alison, whose historical writings, appreciated in the present, are destined to obtain what they deserve—more important attention in the future. The late Sir Archibald Alison, born in 1792, married in 1825 a daughter of Lieut.-Colonel Patrick Tytler, and the issue of that union is the present subject of our military biography, who was born in Edinburgh, July 21st, 1826. Sir Archibald received his education at those seats of learning, the Universities of Glasgow and Edinburgh, famed for turning out sound and practical scholars; and that their teachings were not lost upon him, is fully evidenced by his having been at the head of the Intelligence Department.

Sir Archibald Alison entered the army November, 1846, and served with the 72nd (Duke of Albany's own Highlanders) during the Crimean campaign. The dates of his commissions are: Ensign, November 3rd, 1846; Lieutenant, September 11th, 1849; Captain, November 11th, 1853; Brovet-Major, June 6th, 1856; Unattached, 19th, 1856; Lieut.-Colonel, March 24th, 1858; Unattached, June 4th, same year; Brevet-Colonel, March 17th, 1867; Major-Cleneral, October 1st, 1877; Lieut.-General, November 18th, 1882. In 1855 he took a distinguished part in the expedition to Kirtell, and was present at the siege and fall of Schastopol, including the attack on the Redan, June

18th. For these services he received the medal with clasp, the Turkish medal, and the brevet rank of Major. The Crimean War over, he was not long inactive. His services were soon required again, and in the Indian Mutiny he was employed as military secretary to Lord Clyde (then Sir Colin Campbell), and acting in the above capacity during the operations in India, Sir Archibald was severely wounded, and lost his left arm at the Relief of Lucknow. For his brilliant services in India he was made Brevet-Lieut.-Colonel, received the medal and clasp, and was invested with the Order of Companion of the Bath.

The next operations in which Sir Archibald Alison was engaged, were those of the Ashantee War under Sir Garnet (now Lord) Wolseley. Appointed brigadier-general of the European brigade, he was second in command during the whole of the Ashantee War from December, 1873. Sir Archibald led the brigade under his command at the battle of Amoaful, and after that successful issue advanced on Becqua. He subsequently was present at the battle of Dodashu, and crowned his achievements by sharing in the capture of Coomassie. For his services in Ashantee he received the K.C.B., and the thanks of Parliament conveyed in the following terms:—

"30th March, 1874. Proceedings of the House of Commons. That the thanks of this House be given to Brigadier-General Sir Archibald Alison, Bart., and to all the other officers of the Navy, Army, and Royal Marines, who have taken part in the operations on the Gold Coast and the expedition to Ashantee, for the gallantry, energy and ability, with which they have executed the various services which they have been called upon to perform in a most unhealthy climate."

In the intervals of his various periods of active service Sir Archibald Alison held many important staff appointments. He acted as Adjutant-General in the south-western district from 1872 to 1874, and was Deputy Adjutant-General in Ireland from 1874 to 1877; Commandant at the Staff College, Sandhurst, 1878, and D.Q.M.G. (Intelligence Department), Horse Guards, in the same year. In 1869 he published an essay on the subject of army reorganisation, which was favourably received by the press and military critics generally, and is to this day worthy of perusal by those interested in the question.

On the beginning of "military operations" in Egypt, after the prelude which led to them, the bombardment of Alexandria by Sir Beauchamp Seymour (now Lord Alcester) Sir Archibald Alison was appointed, ad interim, to the command of the British forces at Alexandria, pending the

arrival of Sir Garnet Wolseley, appointed to the chief command. It would, however, be far beyond the limits of these outlines of his military career to sketch, even briefly, the brilliant services rendered by Sir Archibald Alison and those under his command in the early days of the Egyptian campaign, in keeping successfully in check the bulk of Arabi Pasha's army, which was opposed to them.

Sir Garnet Wolseley, having pushed forward to Ismailia, issued order on August 29th for the brigade under Sir Archibald Alison to embark at Alexandria for the former place, leaving Major-General Sir Evelyn Wood, V.C., in charge of the city and the lines at Ramleh. Sir Archibald had now reached to be—what he had often stated to have been the greatest ambition of his life—the general of a Highland brigade.

The special correspondent of the Daily Telegraph thus describes their departure for the front :- "At intervals between one and six o'clock the 42nd, 74th, 75th, and 79th Scottish regiments marched from the railway station to the new quays with bagpipes or bands playing. The men looked well after the camping out at Ramleh, and as they passed through the streets, crowded with foreigners of every possible nationality, the fine physique and soldierly swing of the Highlanders, commanded by Sir Archibald Alison, evoked praises many and loud." The midnight march to Tel-el-Kebir is a matter of history too well known to be re-told; but the assault is best described in Sir Archibald Alison's own words, who, in the following graphic description, proves his father's mantle to have fallen on him, and that he can wield the pen with the same power as the sword :-

"It exercised upon me a singular fascination and the words of the Roman gladiators came to my mind 'Ave Cæsar Imperator! Morituri te salutant.' The first thin dawn of breaking day was just beginning to lighten the east when a few shots fired into our men showed that we had touched the Egyptian outposts; the click was heard fixing bayonets; a deep silence followed; the measured march was resumed, and suddenly out of the darkness there flashed a long blaze of musketry that rolled away on each flank, and by the light of which we saw the swarthy features of the Egyptians, surmounted by their red tarbooshes, lining the ramparts in front of us. I never felt such a relief in my life. I knew that Wolseley's star was bright. A solitary bugle rang out, and then, with a cheer and a bound, the Highlanders rushed in one long wave upon the works. The first line went down into the ditch, but for a time could make no way. Some fell back into the ditch, the majority sprang over the summit, the rest rushed on, and then the battle went raging into the centre of the space behind. . . . . Here too I must do justice to those muchmaligned Egyptian soldiers. I never saw men fight more steadily. They were falling back up an inner line of works,

which we had taken in flank. At every re-entering angle, at every battery and redoubt, they rallied and renewed the fight. Five or six times we had to close on them with the bayonet, and I see these poor men fighting hard when their officers were flying before us. At this time too, it was a goodly sight to see the Cameron and Gordon Highlanders mingled together as they were in the stream of the fight; their young officers leading in front, waving their swords above their heads, their pipes playing, and the men rushing on with that bright light in their eyes, and that proud smile on their lips, which you never see in soldiers except in the moment of successful battle."

Sir Archibald Alison received the thanks of both Houses of Parliament for his services in Egypt. Lord Granville, who moved the vote in the House of Lords, said: "Sir Archibald Alison, by bold and skilful action had made safe our position at Alexandria. The value of recent tactical training was shown on that occasion;" and Mr. Gladstone in the Commons declared, "Sir Archibald Alison has received the most marked token of confidence of his sovereign and his country in being selected to the chief command of the considerable force now remaining in Egypt. on which the security and tranquillity of that country have yet to depend." The citizens of Glasgow were not backward in recognising the brilliant deeds of their countryman, for they presented him with a sword of honour manufactured by Messrs. George Edward and Sons, of Buchanan Street, Glasgow, and the Poultry, London, which is a marvel of beauty in design. It is in the form of a claymore, or Scotch broadsword, and is decorated in the Italian style of art, into which several Egyptian and Scotch details are introduced.

It may be very plausible to urge the Vixere fortes ante Agamemnona theory, and to argue that ere now victories have been won by generals who were devoid of education, and by troops ignorant of the science of warfare. But on the other hand, the Franco-German war proved that the more thoroughly military the generals were, and the more intelligent the soldiery under their command, the more certain was the ultimate success. Sir Archibald Alison is emphatically a soldier of to-day, not of a previous epoch. His share in the success of the late Egyptian campaign is too well recognised to expatiate upon. He has carried out every task set him in a masterly manner, and in peace as well as in war he proves an able general. Succeeding to the Aldershot command August 1st last year, he has worked the troops under him to a high state of efficiency, considering the puerile elements he has to deal with.

In conclusion, Sir Archibald Alison married the daughter of James Black, Esq., of Dalmonach, N.B. He has held many high offices under the Grand Masonic Lodge of Scotland, and is a member of the St. Mary's Chapel Lodge.

A. L'ESTRANGE.

# THE TRUE STORY OF A SOLDIER.

BY ERIC ROSS.



THE sun was shining down upon the wide common of Greywood one Saturday afternoon, and all the inhabitants of the township were there assembled to witness the skill and prowess of the youthful cricketers, who were never tired of practising the first of English games in emulation of greater communities in the close vicinity.

The common could show but little grass, and there was no uniformity in the grouping of the buildings that surrounded it. As a rule, the backs of the houses looked this way, and on the day of which we are writing, the old folks were seated in the open air by many a door.

A fine old Gothic church stood at one end of the open space, and a number of colossal mills flanked by weaving sheds at the other. Glimpses of a beautiful valley were still to be caught beyond those far-from-picturesque hives of industry, and the river that served a great purpose here, murmured farther down, in the shadows of ancient and luxuriant trees, while its mossy banks were studded with wildflowers of matchless tints.

"That lad o' thine is a tip-topper," remarked Gideon Howarth to Mr. and Mrs. Connor.

Gideon was the great authority in the little town, after the "parson" and the "methody praycher" and was generally known as the "owd sargint." He had fought at Waterloo, and not only enjoyed a fair pension, but was the proprietor of a row of houses which a well-to-do brother had left him.

Everybody consulted the sergeant when in difficulty, and he was always liberal with his advice, whether it was sought for or not. "The lad's reet enough," replied Thomas Connor, laying his local newspaper upon his knee while he pushed his spectacles up over his wrinkled forehead; "only he's more fond o' cricket an' books than o' his wark. He wunnot tak' to the mill, do what I con, an' so I'm thinking I'll send him to Manchester to learn some other trade."

"He'll do weel enough at the shoemaking," said Silas Connor, the lad's eldest brother, who was no credit to the calling he had just named. He stood with his back against the brick wall, smoking a short black pipe with a discontented air. "But he'll hev to get some o' his stuck-up pride dusted out o' him," he added maliciously, "before he'll do good anywheer. I wish feyther 'd gie me the taching of him."

"A nice tacher you'd be," exclaimed a tall, bare-armed handsome girl, who sat sewing beside her mother. "Thy brass is always spent afore the week's end, what wi' drinking and gambling. Thou connot go to Bellvue to-day because thou'rt cleared out. As long as I con work three looms, thou'lt have nowt to do wi' our Mark, I con tell thee."

"I dunnot know that too much school eddication is good for a working chap," murmured the father in a perplexed way. His youngest son was a great trouble to him. The School Boards were yet unthought of, and the school an institution by no means popular in some corners of the country. The general idea prevailed that "book-larning" prevented lads "getting on at wark" and so it was not encouraged.

"Our Mark'll ne'er be a shoemaker or a tailor ayther," said some one with a quiet voice. Everybody turned to the new speaker, a pale-faced firmly-built little man with a silky black beard and moustache, and large thoughtful eyes. There was something about him that savoured of the sea, you could not decide what, but there it was; it might be the tie of his black silk neckerchief, or the easy roll of his gait—no matter what, he seemed distinct from the mass of his fellows, as indeed he was from the fact that he earned four pounds a week, a sum which the poor spinners and weavers looked upon as ranking with untold wealth.

This was Robert Connor, the engineer at Barlow's works. He had been at sea for some years on the Liverpool ocean steamers, and was generally considered a "man of the world."

"I'll tell thee what 'tis, feyther," he continued. "We'll ha' no more trouble ower Mark. He'll go no more to the mill—if you agree wi' me. He's too good for any trade I know o' hereabout. Anyway, my plan is—send him to school to Manchester until he finds out what calling he

likes best. Fowks always succeeds at what their fancy leads them to. I'll stond him a pound a week for the fees, the books and his living, when he's away fro' home."

"And I'll take care that he's weel clad," cried Polly, looking up with glistening eyes towards her favourite brother.

"Hey! look at that!" shouted the old sergeant. "There's a ball for thee. That's thy Mark. He'll mak' fower runs ower that." Then after a pause, during which all watched the players, he went on: "Eh, by gum, he'll mak' six," and what more the veteran would have said, was lost in the spontaneous cheers which rose on every hand.

A quarter of an hour later, a smart handsome lad, with light brown hair and fearless frank eyes, came from among the players in the direction of the group to whom we have been listening. His trousers were of fustian, but fitted his rounded limbs finely. His striped cotton shirt was open at the neck, and showed a skin of dazzling purity, glowing with robust health.

"It would be a shame to shut a fellow like that up a his days in a musty, fusty mill," cried Sergeant Howarth, who was a fine ruddy-faced patriarch of about seventy years of age. "He's noan unlike I wur when I cut away an' 'listed. He'd mak' a fine sojer."

"I should na like that to be the trade he would select," saidquiet Robert Connor.

"And why not?" asked the old non-commissioned officer with some asperity. "There's good an' bad o' a' trades, but a smart soldier in a crack corps is not to be sneezed at, I con tell thee. Look at that! the lad was made for a soldier—he already has the manners of a gentleman."

"He gets them oot o' the story books that Polly keeps buying for him," growled the discontented Silas.

The cause of these last remarks was a very simple incident. Miss Birley, the vicar's only daughter, crossed young Mark Connor's path on his way to the house and spoke to him.

He doffed his cricketing cap immediately in a very graceful manner to the young lady, and his mobile face flushed with rich colour as he answered her inquiries. When she passed on he looked after her with love in his young eyes, but the people who were talking of him knew nothing of that.

"It's the Irish blood that's in him—and the best blood of the Fitzgeralds at that, not so far back, ayther," said the boy's grandmother, who had been sitting between her daughter-in-law and granddaughter, as silent as the former. "He's like what your father was, Thomas, the furrst day I clapped eyes upon him, an' that was at Bury fair, five and sixty years ago this very month. Ah! he was the bowld one. But for the trouble at home, my father's daughter could have looked higher, no doubt, but he was a good man—none better. His family followed mine from the ould country, but our children and our children's children are all English now, an' good at that, glory be to God."

"You're a lucky dog," began the sergeant to Mark striking the ground with his stick as the lad approached. "Here's your brother Bob going to send you to school until you fancy a calling for yourself, an' the best o' sisters is going to keep you well rigged out while you're theer. What do you say to that?"

"I say," said Mark, going over and taking his brother Robert's hand in his two, "that Bob's a brick; and Polly! well, Polly's an angel," and he took the girl's face between his hands and kissed her lips heartily.

"That's some o' the rubbish he reads in the journals. He'll never come to any good," growled Silas.

"He takes after his grandfather," said the octogenarian dame pointedly, "an' that's more than I con say for you, Silas. Now Mark, my jewel, tell your ould granny what trade ye'd be after choosin' whin ye've been taught all that the schools con larn you."

"It's not a trade, granny," answered the youth shyly. "I think they call it a profession."

"A profession!" sneered Silas.

"A profession!" echoed all with different expressions of face. Robert and Polly were pleased, and the cunning old sergeant delighted.

"The profession of arms, I should think," cried the veteran triumphantly.

"Yes, sergeant," answered Mark. "I would like to be a soldier, and get promoted, and come back covered with wounds and medals to—"

"Marry the parson's dowter," snarled Silas, finishing the sentence in his way.

"Yes, Silas," proceeded young Mark in a low tone.
"You have just hit it. I'd do anything daring to win the vicar's daughter."

They all laughed at this—it seemed so utterly beyond the possible in the future.

"I'll have to talk to thee about soldiering," said Robert Connor gravely, as he followed Mark into the red-tilefloored kitchen.

Mark Connor was fifteen years old when he went to live in Manchester and attend a public school.

Polly took him to a good tailor, and the new clothing made such a metamorphosis in the appearance of the lad, that all Greywood looked in wonder at him on the first Sunday of his coming home.

Afterwards, it was arranged that he should return there every Saturday night, and it is needless to say how he delighted the family circle on those occasions with proof of his progress in "larning!"

Robert was never tired of providing him with new books, and always some among the number could be found which were intended to strip the life of a soldier of the glamour of romance. Mark was silent on the subject, but he never passed down Deansgate on a Saturday night but he halted at the corner of Bridge Street, to gaze long and with undisguised admiration on the group of recruiting sergeants

who haunted that locality in pursuit of raw material to put before "shot and shell."

He was entering his eighteenth year and was about to compete for a scholarship at one of the most famous of Oxford colleges. Every one believed his chance to be the best, but it never came to the proof.

The Crimean War had broken out, and the excitement had at length caught every class in the kingdom. Alma had been fought, and Balaclava had sent a thrill of pride through every British heart. The Queen asked for more men, and her duchy of Lancaster sent heroes to the front obedient to her call.

Recruiting sergeants no longer lounged in the vicinity of well-filled public-houses. Fife and brass bands paraded the streets, and martial music filled the air. Mechanics, clerks, and merchants were infected with the enthusiasm

for fighting, and unconsciously fell into step as they walked the pavements of the cotton city to the strains which were never still.

On his way home at the end of one week, Mark Connor approached a recruiting officer and said:

"I'll take the Queen's shilling, but I don't wish to join until Monday."

"All right," answered the man, with a keen glance at the splendid youth whose manhood seemed complete in six feet of symmetrical flesh, blood, bone, and muscle.



CONNOR TAKES THE QUEEN'S SHILLING.

He told the people at home nothing of what he had done. He knew that almost insurmountable obstacles would be put in his way. His heart bled for them, but his resolution was greater than his love, or rather it ran parallel with it. The martial blood of his Celtic forefathers was coursing hotly from his heart, and he panted for the battle-field.

When the news came to his family on Tuesday morning, Robert and Polly were those who felt the greatest pain. The old grandmother and Sergeant Howarth actually gloated over the intelligence. Mark's letter was tender and true, but gave no clue to where the writer had gone. Robert somehow traced him to Chatham, and afterwards followed fruitlessly to Portsmouth; but he returned home without seeing him, a sad, nay, an almost broken-hearted, man.

Mark was quiet Robert's pride. He had never married, and the boy was the light of his eye, and the pet hope of his heart. A blight seemed to have fallen on Thomas Connor's family, and the people roundabout whispered, "Sarve them reet; they should na ha' filled the lad's head wi' so much schoolin'."

Presently, however, more of the best blood of Britain went forth to meet the Russians, and spiteful sayings were forgotten.

One Saturday afternoon Sergeant Howarth, clad in his Sunday attire, and with all his medals displayed, came hobbling up to the desolate house of the Connors in a state of high excitement. They questioned, but could get nothing clear from him except that the "parson" was coming.

The Reverend Harold Birley came, accompanied by his

only daughter, Mariam. He carried the *Times* open in his hand, and his voice was broken with emotion, as he read the extract from the war news that concerned the listeners as much as it did himself.

It was the first full account of the storming of the Redan and the Malakoff.

He proceeded:

"'The gallant regiment, true to its traditions, pressed forward undaunted a third and fourth time. More than once they seemed to be lost in the midst of the black grey myriads of Russians, who swarmed upon them from the

ramparts over bastion and glacis. The colonel and other field officers had already fallen, and a third of the strength of the corps did not rally to the last bugle call. Another charge was made under the command of young Captain Birley, and for a brief period the small red band appeared to carry everything before it.

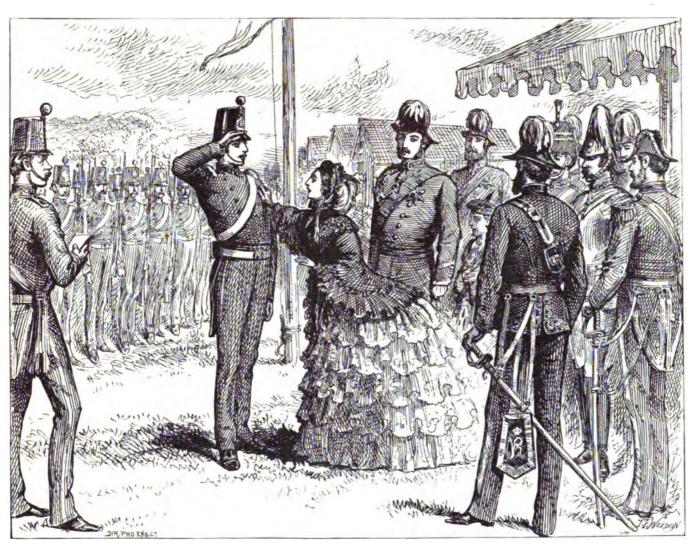
"'Another salvo from the heavy cannon above, and then a dogged partial retiring as before. Their last chief had fallen. Young Birley and two sergeants were left within the enemy's lines. All was confusion for a time, and then a hero rushed to the front and brought order out of chaos. This splendid fellow—Sergeant Mark Connor—by voice and example influenced his comrades to another terrific and irresistible advance. In five minutes Connor was seen in a hand-to-hand combat with a number of

the enemy far in advance of the remnant of his regiment—now only a few score men—where he fought with Lancashire doggedness until he succeeded in dragging from his Russian captors his wounded officer Captain Birley. A detachment of Highlanders then came to the assistance of the gallant survivors, and the British were soon in possession of the first redoubt taken on this eventful day.

"'Captain Birley and young Connor turn out to be townsmen—the father of the former is the respected vicar of Greywood in Lancashire. language that would have done credit—or rather the opposite—to a survivor of our famous army in Flanders. The grandmother found great difficulty in suppressing a genuine Hibernian "Hurroo," and Miriam Birley said simply and no doubt thoughtlessly:

"How noble of him! I shall always love him for saving my brother's life"—which was beautifully dutiful, to say the least of it.

The people all yearned for a sight of the man who had brought so much honour upon them, but years elapsed before he saw his native land again.



HER MAJESTY ATTACHES THE VICTORIA CROSS TO CONNOR'S BREAST.

"'We have great pleasure in recording that the heroic sergeant was recommended for an officer's commission by the commander-in-chief the following morning. We are only echoing the general sentiment, when we say that all ranks have reason to be proud of Ensign Mark Connor.'"

All the listeners were visibly affected by the perusal of the good clergyman. The "owd sergeant" asserted that he had always prophesied such a career for his favourite, in The Indian Mutiny followed the war in the East, and Mark Connor again distinguished himself from first to last, but notably at Lucknow.

The vicar died before the crowning pleasure of seeing his son in this life, and Miriam left Greywood for London, there to reside with some relations until her brother's return. She often corresponded with the Connors—the Crimean experience having formed a bond between them which no difference in rank could qualify.

One day they received a letter from her which we are permitted to copy here.

#### "MY DEAR MARY,

"Our regiment landed at Portsmouth last night, and were greeted with tremendous cheering by vast multitudes. It proceeds in a few days to the New Camp at Aldershot, where Lieut.-Colonel Birley and Captain Connor—with others—are to receive the lately-created and greatly-coveted Victoria Cross from the Queen's own hand. Your feelings I can imagine by my own. I am afraid to go there, and dare not miss the splendid triumph. Will you come with your sincere friend

MIRIAM."

A "splendid triumph" rightly described that grand parade upon the sandy plain upon which the Queen's pavilion had been erected.

The clubbed bands played the National Anthem, as Her Majesty, accompanied by her illustrious consort—then still in the flower of robust manhood—appeared before her fighting men. There were few dry eyes there as our sovereign lady pinned the ribbon and cross "For Valour" on the breasts of her faithful soldiers—the bravest of the brave. Brown-haired blue-eyed Mark Connor was the beau ideal of a British soldier, and every eye turned upon him whose name had become already a household word.

The cheers that rose up to the blue heavens, will never be forgotten by those who were present on this unique occasion. Every bosom thrilled with ennobling emotions, and Mary Connor and Miriam Birley were not the only women there who wept copious floods of joyful tears. It is rumoured that Sergeant Gideon Howarth also was guilty of weakness, but he always denied this with a volubility that threatened a recurrence of language of the nature of that associated with the name of our army in Flanders.

The humble engineer, Robert Connor, was the proudest man in England when his young brother introduced him to some of his tried friends.

"I owe all to him," Mark said, and his eyes fell upon his brother officer's sister—the girl who had crossed his path on that memorable cricket-field—then he added mentally "and to her."

To win her was his greatest incentive to success—and he had succeeded.

We will not follow them through the love-making that could not fail to come after this. Not "a laggard in love" was this brave soldier, and so the day dawned at length when Colonel Birley gave his sister to the comrade who had saved his life, and the little town of Greywood rejoiced with a great joy.

The granny and Sergeant Howarth have long been beneath the turf, but Polly is a prosperous matron, and Robert Connor a wealthy ironmaster.

A good many of our readers will doubtless recognise the soldier we have—for reasons that will be appreciated—called Mark Connor. He has many admirers in every rank of life, but none so loyal as his wife, who is never ashamed of confessing that her Lancashire lad rose from the ranks. She has prevailed upon a friend to endeavour to relate this *True Story of a Soldier*.



### ANNIVERSARIES OF BRITISH VICTORIES.

#### THE CAPTURE OF NOWAH, IN 1819.

THE fort of Nowah, in the territory of the Nizam of the Deccan, having fallen into the hands of a rebellious chief, was besieged, early in January, by four infantry battalions and some cavalry and artillery, all belonging to the Hyderabad Contingent. Nowah was a square mud fort, with towers at the angles and at each side of the only gateway, and the latter was further protected by an outwork. Like many Indian forts, it had a fausse-braye all round, with a dry ditch, covered-way and glacis; but, unlike most, its glacis covered the wall of the fausse-braye. As the place was very defensible and fairly armed, and as the garrison seemed determined to hold out to the last extremity, Major Pitman, who commanded the attacking force, deemed it expedient to besiege in regular form. Nowah was invested on the 8th of January; two batteries opened fire on the 11th, and others soon after; some vigorous sorties were repulsed; a large breach was made, and a sap was carried to the crest of the glacis. On the last morning of

the month, a mine was sprung which blew down a considerable length of the counterscarp, and the place was immediately stormed notwithstanding a desperate resistance.

The most remarkable feature in this siege and capture was the fate of the unfortunate garrison. According to the official account, 400 of their bodies were found, and 100 prisoners were taken, of whom eighty were badly wounded. The total number, 500, is thus accounted for, as we are expressly assured that not a man escaped. The besiegers lost only twenty-two killed, and six European Officers (including one of H.M. 86th regiment), and 174 natives wounded.

The Hyderabad Contingent is commanded by British Officers, and, though paid by the Nizam, appears in our Indian Army Lists. The word "Nowah" is borne by the 1st, 2nd, and 3rd infantry regiments, and by a battery of the Artillery.

E. O'CALLAGHAN.

# TRANSLATION FROM THE REVUE MILITAIRE BELGE, PART III. 1884.

(C. MUQUARDT, LIBRAIRIE MILITAIRE, BRUXELLES.)

EXPERIMENTAL PRACTICE WITH SHOT AND SHELL, UPON ARMOUR-PLATED CUPOLA.

BY MAJOR C. ABERCROMBIE COOPER.



ESULTS of experiments against half of the arch of an armour-plated cupola, for two guns of 30,5 cm. (12-inch), carried out at the Buckau Polygon, May 26th and 23th, 1884.

Object of the practice:—Proof of the arch of the above-mentioned cupola by four shots from a Krupp gun of 30,5 cm. (12-inch) and 25 calibres length.

Togget —The experimental plate weighing 47,500 kg.

Target.—The experimental plate, weighing 47,500 kg. (46 tons 15 cwt.) and of a minimum thickness of 320 mm.

A wooden screen was placed as usual to stop the splinters of projectiles.

Gun.—Krupp 30,5 cm.; length, 25 calibres, on a Gruson carriage for the smallest embrasure, 1880.

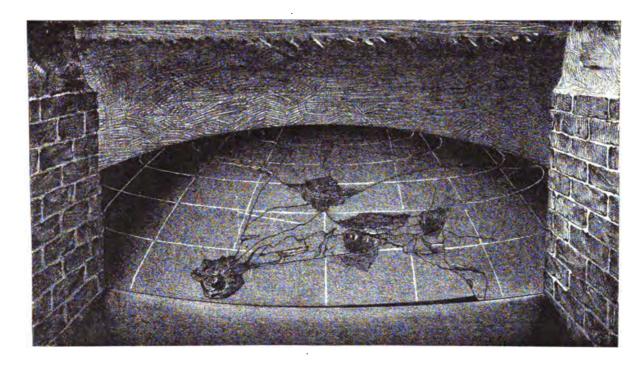
Projectile.—Steel Krupp shell, 3.5 calibres in length, without bursting charge, average weight 445 kg (981 lbs.).

Charge.—80 kg. (176 lbs. 6 oz.), P.P. manufactured in 1880.

Range.—29 m. (95 feet).

Final velocity -345 m. (1132 feet).

Energy.—2700 tm. (87181 foot-tons).



(12.60"), was put together, according to its position as part of the cupola, in a half-circle of strong iron plates; for the other half of the arch was substituted a strong counter support, itself resting on masonry.

In order to obtain the greatest angles of incidence the trial plate, instead of being horizontal, was inclined at an angle of 5°, that is, the surface of the support made an angle of 5° with the plane.

In the plate were a few small cracks, resulting from the contraction of the metal; these cracks had been closed by means of steel wedges. There were also three holes,  $12 \text{ cm. } (4\frac{3}{4} \text{ in.})$  in diameter, for the purpose of introducing machinery.

1st round.

Angle of departure.—5° 6' depression.

Angle of incidence —24° 14'.

Point of impact.—50 cm. (1968 in.) left of the centre line; 34 cm. (1340 in.) from outer edge.

Effect.—Excoriation, 22 mm. ('87 in.) in depth, with lamination of  $58 \times 29$  cm. (23 × 11½ in.). A crack showing across the plate from the point of impact to within 62 cm. (24½ in.) from the base line of the plate, and three smaller cracks.

The projectile was broken up into numerous pieces, as in all the other rounds.

2nd round.

Depression.-4° 25'.

Angle of incidence.—19° 35'.

Point of impact.—On the centre line of the plate, 126 cm. (49.6 in.) from the circular edge.

Effect.—The projectile struck the central aiming-spot and caused an excoriation of 10 cm. (4 in.) in depth, surrounded by a more superficial lamination of  $30 \times 50$  cm. (11.8  $\times$  19.7 in.).

Four new cracks were formed, one extending upwards and to the right to within 64 cm. (25.2") of the base line, and three smaller ones. On the back of the plate the principal cracks were even more distinct.

3rd round.

Depression.—4° 42'.

Angle of incidence.—22° 52'.

laminations upwards and towards the points of impact of rounds 1 and 3, as well as new cracks and extensions of former ones. The broken piece of the plate was shifted 35 mm. (14") to the right.

The displacement of the plate is 150 mm. (5.9") on the left, 14 mm. (55") in the centre, and 10 mm. (39") on the right.

The plate appearing quite fit to bear a continuance of the fire, it was resumed on the 28th May.

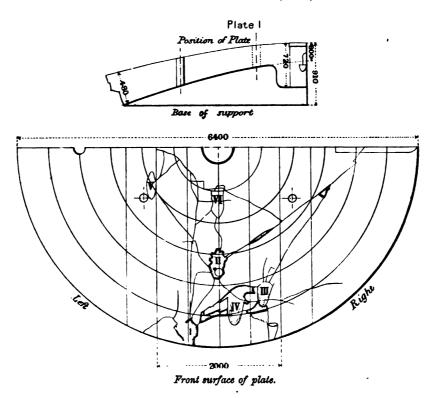
### 5th round.

Projectile.—Flat-headed Krupp shell, diameter of head, 137 mm. (5:39"), weight, 445 kg. (981 lbs.).

Depression.-3° 48'.

Angle of incidence.—12° 18'.

Point of impact.—106 cm. (412") left of the centre line, 60 cm. (23.6") from the base line.



Point of impact.—72 cm. (28.3") to the right 1 of the centre line, 70 cm.  $(27\frac{1}{2}")$  from the circular edge.

Effect.—A lengthened depression, without lamination. Four additional cracks formed, the former cracks lengthened.

4th round.

Depression.—4° 45'.

Angle of incidence. -23° 25'.

Point of impact.—28 cm. (11") above the centre, 45 cm. (17.7") from the circular edge; between the shots 1 and 3.

Effect.—The blow, falling on a segment separated by 3rd round, produced, besides a flattening at that part,

1 A gauche in the article should be à droite.

Effect.—A lengthened depression, of slight depth, without lamination; three small cracks.

Back of the plate.—The displaced fragment is further bent down 25 mm. (1") but still adheres firmly to the plate.

6th round.

Projectile.—Flat-headed steel Krupp shot.

Depression.—3° 44′.

Angle of incidence.—13° 14'.

Point of impact.—On the centre line, 84 cm. (33") from the rear edge.

Effect.—A lengthened depression, without scaling; two small cracks formed, slight increase in length of previous ones.

The practice had to be stopped after this round on account of the screen having suffered such injury that it no longer afforded sufficient security from splinters.

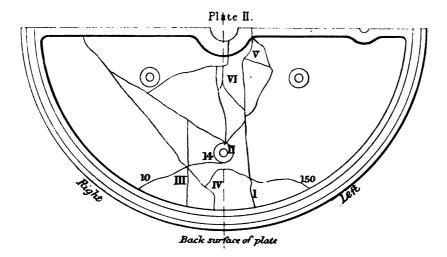
### Resume

The plate has given proof of a strength of resistance more than satisfactory in case of an actual attack, for then it would be impossible to effect the fire with the same angles of impact as in the trials. Therefore the measures adopted may be considered sufficient.

The advantages of the arched construction have been demonstrated; for the fourth shot, falling on a part completely separated from the rest of the plate, was powerless to drive it towards the interior of the cupola, notwith-

effect of the shot, is much more violent according as the angle of impact is greater; the effect obtained from the increase of that angle by inclining the plate and by depressing the gun would largely counterbalance the action of the heavier charge which would be employed in case of war. The violent blow of the rear end of the shell explains the fact that all the projectiles were broken up, which would have caused surprise, looking at the quality of the Krupp steel, if they had only undergone simple deflection from the ogival head.

The resistance given by this plate imputes to it a considerable excess of strength in its favour. The cracks, on account of the arched construction and the pressure resulting from it, remained quite closed and had at the



standing the weakening of the arch by a crack in the base plate. The sixth round also bore on a portion detached by cracks without moving it towards the interior.

The small cracks resulting from contraction were without unfavourable influence on the strength of the plate, for the cracks caused by the practice were produced and increased independently of those fissures.

The great influence which the angle of incidence had on the action of the projectile proves of the utmost value. The effect of the blows on the lower part of the plate was incomparably greater than that of rounds five and six, although the latter attacked an already enfeebled plate. It would appear that the projectiles, as soon as the ogival head was in contact, struck with the base, and that this blow, to which must be attributed a great part of the

surface the appearance of most minute fissures, even when they had gone through the entire thickness of the plate.

One third of the right and a like proportion of the left side of the plate were quite uninjured, and preserved a perfectly intact power of resistance to fire.

These results are important from more than one aspect. Until now a particularly destructive effect was attributed to ricochet fire against armour plates, and the arched construction was always looked on with distrust. The results of the experiments at Buckau have removed all these doubts. The thickness of the plate, taken with regard to its diameter of 6 m. 4 (19 feet 10.8 in.), was a minimum compared to that of the armour plates subjected to trial previously, and these dimensions have nevertheless given a power of resistance more than requisite.



### SHORT SERVICE AND THE EMPLOYMENT OF RESERVE SOLDIERS.

BY CAPTAIN C. W. WHITE.

Author of "Our Military Position," "The Army and the Public," "The Truth about the Army," &c.



APPENING the other day to be in the east of London, and having been told that there were in the neighbourhood a large number of Army Reserve men out of work, I thought that an hour or two could not be better or more advantageously spent, than in interviewing some of

these men, with a view to ascertaining the causes which militate against their chances of obtaining employment.

The subject is one in which the country at large ought to be interested, seeing that it affects the whole question of recruiting, and it has a special importance just now, when a movement has been set on foot in India, under the auspices of the Commander-in-Chief, Sir Donald Stewart, having for its object the amelioration of the hardships which discharged soldiers undoubtedly suffer on their arrival in England from the East.

In my peregrinations the other day, I was met at the outset by what at first appeared to be a formidable difficulty. The district might, as I had been assured, be flooded with men of the class to which I refer, but how was I to find them? The idea struck me, to call in the assistance of that always useful and reliable body, the police.

Accordingly I proceeded to the nearest police-station, and was fortunate in coming across a most obliging super-intendent, who entered at once into the spirit of my enterprise—if such I may call it—and put me in the way of obtaining all the information I required.

His first step was to send for an ex-cavalry man, the possessor of the Afghan medal, with three clasps, now a constable in the force. With him I started on my rambles.

My guide was a bright and intelligent fellow, who had left the army as a corporal. I felt myself to be particularly fortunate, for I had chanced to hit upon the very man I wanted to enable me to acquire the knowledge of which I stood in need.

I interrogated my guide—a guide I certainly considered him, as he led me through a maze of streets and alleys literally reeking with dirt and filth—as to his experience of the present system of short service and deferred pay. He expressed himself freely on the subject, showing that he had given it his attention. I considered his views of so much value that I made a special note of them, for it is as well to hear all sides of a question; and the public generally, though afforded many opportunities of listening to and reading what the advocates and professed advocates

of the present system have to say, get so few chances of ascertaining the feelings of the rank and file, that it is right and proper that they should know how the case actually stands, from the lips of an unprejudiced critic, such as this police-officer must certainly be considered.

Now as regards short service, I contend that the system has failed to produce the beneficial results which were expected of it by its founders. Why has it failed?

The reasons are many and varied, one great reason being that sufficient care is not taken at the outset in the selection of men; a second, that many of those in office—including, I regret to say, some soldiers of position and influence—though knowing the system to have failed, have not the independence to say so, and therefore lead the public to believe all is proceeding satisfactorily, when in their innermost consciences they know that such is not the case.

And now, before proceeding further, I will summarise briefly the conclusions I have arrived at with respect to short service, after hearing with my own ears, and seeing with my own eyes, evidence of the working of that system under conditions which it is no egotism on my part to say, have enabled me to judge as fairly and accurately as any living man has been able to do, where and why the system fails.

I have been engaged in collecting evidence for fourteen years; I have made army administration my constant study; I have read every Blue Book carefully; I have gone critically into every War Office Return. I think therefore, I may fairly claim to know something about what I write in connection with my subject.

I quite expect to be told that I am playing a Cassandralike part; that I have no practical knowledge; that I am presumptuous; that my ideas are exaggerated; that the system is working well.

I may be a military Cassandra; I may have no practical knowledge; I may be presumptuous; my ideas may be exaggerated—I will allow all these things, and most readily: but one thing I will not allow, viz., that the system is working well, unless its merits are to be gauged by the facilities it offers for those in authority, for political or other reasons, to manipulate figures in such a way as to disguise what might be considered unpalatable truths.

My object in undertaking my mission the other day, was to ascertain from the men who had been the victims of the system, what they considered to be its drawbacks.

The men I spoke to had worn the military shoe. What

I, in effect, said to them was this: "Look here, men, you have worn the shoe; just let me know where in your individual cases it pinched most." Unless a bootmaker knows where his shoes are pinching, it is quite impossible for him to remedy defects. No respectable tradesman objects to being told when his shoes do not fit. Why should Lord Wolseley and other supporters of the present system so strongly object to its being criticised?

I was careful to keep my inquiry within narrow limits. All I sought to do, was to obtain evidence on two points: one the working of the short service system, the other the working of the system of deferred pay. As regards short service, I have said that the system fails to a great extent because care is not taken in the selection of men. There is no gainsaying the fact that many a lad of sixteen or seventeen years of age is passed as eighteen, because at the time he offers himself for enlistment, there may be a

dearth of men, and the War Office officials who have introduced short service, and are never tired of telling us how well the system is operating, will be anxious to swell numbers and show a "good return."

Take a case. A lad, to all outward appearances eligible, presents himself before the recruiting officer. He may be willing enough to do all that is needed of him. He may possess all the instincts requisite to make a soldier, he may be steady and respectable, but on medical



BOY RECRUITS UNDER MEDICAL EXAMINATION.

examination he is found to be lacking in physique, his chest measurement is small, and he is suffering from some hereditary disease which may, and probably will, develop itself. He will fill a gap, though, he will add one more to the effective establishment of the army; and that at the present moment may be a great consideration. The lad is evidently bent upon becoming a soldier. If he does not pass in one district, he will in another.

"All right, pass him." The word has been uttered, the lad's fate is decided.

The effective establishment of the army is thus increased by one man. True, the man's usefulness will end there, but of that no matter. This effective soldier will never be fit to go on active service, and if he does manage to scrape through a second medical examination as easily as he has done through the first, and is allowed to embark for India, he will soon break down, from very

want of physical qualities, not from lack of enthusiasm or good will, directly he is called upon to do anything out of the ordinary routine of duty.

But how comes it that the inspecting medical officer is not more exacting? If the lad has not the "makings" of a soldier in him, why let him pass? Ostensibly the inspecting medical officer has power to reject any men who do not, in his opinion, come up to the humble standard of height and chest measurement. In reality his hands are tied to a tremendous extent.

The lad who has just been before him has a weak chest, is suffering from a congenital disease, not in an aggravated form, perhaps, but nevertheless sufficiently marked to raise doubts in the worthy doctor's mind as to whether he will turn out to be all that a soldier, and especially a British soldier—it must not be forgotten how much is expected of the British Thomas Atkins—should be.

Strictly speaking, the inspecting officer has nothing to do with these things. He is told to pass all the men he can. The establishment of the army is short. The Secretary of State for War has, in the course of a few weeks, to make his statement in committee of supply on the army estimates, or, what is often of even more importance, the Adjutant-General — the soldier representative of the War Office, and strong supporter of its policyis about to make a big speech at the Mansion

House, or to the liverymen of some influential city company. This speech will be published far and wide. What a chance of blinding the British public! The opportunity is too good to be lost. If the medical officer is too exacting -I had almost written conscientious—he may get himself a bad name. Questions may be asked as to who the inspecting medical officer is who has been passing recruits in a certain district, and how it is so few have been returned. I have before me as I write, a letter bearing the signature of a high official at the War Office, calling an officer to account because too much discretion has been exercised in the selection of recruits in his district. The Adjutant-General is a believer in young soldiers—he says he is. The medical officer has therefore no alternative but to comply with the wishes of the highest powers and take a lenient view. And so the lad is passed, and after a shortalas! how short sometimes—training, joins the ranks as a

trained soldier. He has now become a man—for official purposes. In course of a few years, his period of colour service having expired, and its extension being declined, the man returns home on transfer to the Reserve.

His constitution—what constitution he ever had—has been undermined. He appears again in his native town or village with a fair sum of money in his pocket. What good is he? None. What work is he capable of doing? Nothing. He never had any stamina to speak of, and what little he did possess, has wasted itself away in a tropical climate. What use has this man been in a military sense? Absolutely none. But I forgot, he has been some use, for he has enabled the War Minister and Adjutant-General to add one more man to the effective establishment of the British army.

For all practical purposes, the man has been little better than a military incubus. Much of his time has been spent in hospital. He has been borne on the roll of his regiment as an effective fighting unit, but he has been this in name only, for he could never have gone on active service—not because he has desired to shirk the hardships and privations of service, but because he was physically unfit to undertake the duties of a soldier, and he ought never to have been passed into the army at all.

In proof that I am not overdrawing the picture, I would refer to certain statements contained in a Blue Book issued some time ago, the report of a committee presided over by the late General Lord Airey, G.C.B., on the state of the army. In that report is given an extract from a report of the principal medical officer during the Zulu campaign, in which it is stated: "It is a fact worthy of remark that nearly all the sick of the brigade are youths who are physically incapable of undergoing the fatigue and exposure to which they have been subjected;" whilst the principal medical officer in the Afghan campaign reported one regiment as being "wholly demoralised on account of the youth and immaturity of the men."

The British public rarely get a chance of seeing the Blue Books presented from time to time to Parliament, and even if they did, would not take the trouble to look into them carefully. Officials do see them and read them. Yet what can be said of the officials who, cognisant of the facts which those Blue Books bring to light, still adhere to their well-worn argument that all is going well. One of two conclusions must be arrived at. I will leave my readers to decide for themselves what the conclusions are to which I refer.

"You have been in India, and were in Afghanistan," I remarked to my guide the other day; "what do you think of the young soldier? Do you agree with what Lord Wolseley and other War Office authorities say—that he is everything a soldier should be?"

"Why certainly not, sir," was the reply. "I have seen these lads in India; I have talked to them—they are principally in the infantry. I see them continually now.

It is a cruel and disgraceful thing to allow them to become soldiers; it is crueller to send them to India, where they wither and die like sheep, or come home so emaciated as to be good for nothing. There are hundreds of them that I know of about here. I will show you some of them shortly. They were no use as soldiers; what can they do now, poor devils, when whatever strength they had, has been taken out of them in the trying climates in which they have served? Where the short service system fails, sir, unquestionably is, that it encourages and provides for such weeds as these being classed as able-bodied men. Able-bodied! Why a two days' march will send them into hospital for a month. For the most part they are simply boys, who are taken in the hopes that they may develop into better stuff. Some may realise the expectation of the recruiting officer, but the majority never will. For them, sir, it is a bad look out."

This was the clear, unvarnished tale of one whose experience gave him a right to be listened to—one, too, who had no reason for speaking anything but the truth.

Do the views of the police-officer support those of the military Cassandras, or do they not?

And now I will turn to the question of deferred pay.

The system has its advantages and its disadvantages. It no doubt acts as a powerful inducement to young men of a roving disposition and men out of work to enter the army; for the idea that after knocking about the world for a few years they will be able to return to their homes, with a—to them—considerable sum of money in their pockets, is one not to be lightly dismissed. In the case of the few the arrangement is beneficial in every way.

But in such matters we have, unfortunately, to think of and legislate for the many.

As regimental officers know, sometimes to their cost, the rank and file of the army are not yet the *elite* of the country, and though, morally, the army has improved of late years, the improvement is due rather to local influences in our garrison towns, and the increased facilities offered to men to find amusement in barracks, than to any actual improvement in the status of those who fill the ranks.

Those who "take the shilling," now, are to all intents and purposes drawn from the same class as those who joined in the old days, but thanks to the advance of education, i.e. since the establishment of Board Schools, the whole tone of the working classes has been raised.

In other words, the benefits which are sometimes attributed to the increased popularity of the service, are to a great extent—if it cannot be said they are wholly due to other causes, first and foremost among which must be placed that of education.

Here it may be desirable for me to reproduce, as far as I can, but in my own language, Constable X.'s summing up on this point, on which I was particularly anxious to obtain information.

It is all well and good to give a man deferred pay on the

termination of his army engagement. But what does it mean? How does the system work in practice?

In seven cases out of every ten, the man, once he finds himself free from the restraints of military life, will go to his friends. Those friends are frequently of the lowest order—public-house loafers and the like. Tom, Dick, and Harry of Whitechapel Road will soon rally round the hero of many fights, and expect the man with money in his pocket to "stand treat" whilst he recounts to them his many and varied experiences in India, Egypt, or at the Cape. The process of beer drinking will be continued day by day as long as the money lasts, and then our hero's bibulous friends and relations will leave him. In a

return to a career of crime; the discharged soldier leaves the service with a character. He has served the State, and earned that character in the State's employ. The State has done with him for a time. The State therefore says to him; "Go your way, do what you please; as long as you are get-at-able, and answer to the call of duty should your services be required, that is all we care about."

The discharged criminal can turn to the police in his despair and solicit help. The soldier has more or less to look after himself.

But to follow my story.

"Question those men, sir," my guide observed as we neared a magnificently embellished gin palace, before



RESERVE SOLDIERS LOAFING OUTSIDE A GIN PALACE.

penniless condition and state of semi-intoxication he will begin to think that it is time for him to "get something to do." Vain hope!

His money spent, he no longer poses as a hero; he is only a discharged soldier now, and in the eyes of some people a discharged soldier, whatever his character, however much he may have distinguished himself in action, is an individual to be ranked very much in the same category as a discharged criminal.

Nay, it is not too much to say that the discharged criminal is often better cared for than the ex-soldier. The criminal is left to his own devices, and may

which some half dozen besotted creatures were grouped. "You will hear what they have to say. Four or five of them are Reserve men, and will, I think, bear out what I have told you, as to the difficulties they encounter in their endeavours to get work."

I acted on the suggestion.

The replies to my interrogations were in all instances to the same effect: "I am willing enough to work, sir, only I cannot get anything to do."

"But why?" I asked; "surely there are any number of openings."

Well yes, to be sure, but they will not have anything to

do with Army Reserve men in these parts. They say that they cannot depend upon them, as they may be called up at a busy time to join the colours, and there would be a difficulty in filling their places. I addressed other men, and received the same answer to all my inquiries. The deferred pay had been spent, and the men, having no trade to fall back upon, had to get along as best they could, doing an odd job here and another there.

Now the question arises, Why does not the State interfere in such a matter as this? Why leave it to Captain Walter—that true soldiers' friend—and his energetic staff of the Corps of Commissionaires to do their good work unaided?

Why call upon officers to supply funds for maintaining that excellent institution, the Army and Navy Pensioners Employment Society, for the purpose of doing that which the State leaves undone?

The State cannot, of course, compel an employer of labour to find a vacancy for an Army Reserve man, any more than it can force him to give employment to a released criminal; but surely the State could do something more than it does at present to popularise the army in a direction in which it could be rendered lastingly popular, by assisting the soldier temporarily discharged from the colours to secure a means of obtaining a livelihood.

The employer of labour will prefer, of course, to have in his workshop or manufactory those who have grown up in his service, and whom he knows he can depend upon and trust. Thomas Atkins, who applies to him for employment has served his country faithfully and well in the ranks of the Blankshire Highlanders, or Territorial Fusiliers, for a period of six years, and has been transferred to the Reserve with a good or exemplary character.

But Thomas Atkins, after all, is a Reserve man, and as such is under pain and penalty to answer to the call whenever his services may be required with the colours. Why, therefore, should Mr. Brown, representing the eminent firm of Brown, Robinson, and Company, sacrifice the interests of his business for the benefit of Thomas Atkins? Mr. Brown may be a man of the most sympathetic nature; he doubtless will feel very much for Thomas Atkins when he dismisses him from his presence with a blank refusal. But he will say to himself, "Business is business. If the State, whose faithful servant this man has been for so many years, sends him adrift on the world, why should I take upon myself to look after him? I pay my taxes, and expect that those who have the handling of the money will spend it judiciously. If men in the position of

Thomas Atkins had claims on the gratitude of their fellow-countrymen, the State surely would make those claims known. There must be something against the man, or he would never have been allowed to fall into his present condition—be compelled to go from house to house, as it were, seeking work."

Now it must be admitted that there is a great deal of force in our friend Mr. Brown's argument. To the ordinary commercial man, ignorant of the ways of the War Office, and unversed in the incongruities of our military system, it will naturally appear somewhat unaccountable that a man who has left the army with a good character, is left in the position of Thomas Atkins. In the eyes of the practical business man, an ex-soldier with a good character ought to be able to get almost any employment; there should be any number of positions of trust which he ought to be able to fill with credit. Notwithstanding Mr. Brown's very proper line of reasoning, the fact remains, however, that the unfortunate Reserve man is left, in only too many instances, in a state of abject helplessness. Mr. Brown will have nothing to do with him. He passes him on to Mr. Smith—"Perhaps he wants some hands." Mr. Smith stands in want of assistance, it is true, but he does not care for old soldiers. "Try Mr. Jones." Mr. Jones once had an old soldier, and he turned out a drunkard; he cannot be saddled with any more. And so it goes on. However desirous the man may be of settling down, he cannot do so, for the simple reason that there is nothing to settle down to. There is but one course open to him, viz. to become what he only too frequently does become from sheer necessity—a public-house loafer. It must be allowed that it is a little hard on the man, but so it is.

As one of those to whom I spoke the other day explained: by the terms of his engagement with the State, he has undertaken always to be at its beck and call. He may be required to rejoin the colours at any moment, and by leaving the country he would become a deserter. He cannot very well move about the country at his will—he is bound down in every way. This certainly is a very cruel condition of affairs, and it is one, I hold, that the State ought without delay to set about to remedy.

But for the present I must close. The limits of my space have, I fear, long since been exceeded, and it is unfair for me to upset the whole of an editor's arrangements, as I shall do, if I go further into the matter this month.

(To be continued.)



### IMPROVED ARM-RACK FOR RIFLES, CARBINES, AND REVOLVERS.

### MANUFACTURED AT ROCK ISLAND ARSENAL.

### DEVISED BY LIEUTENANT D. W. FLAGLER,

American Ordnance Department.

I VENTURE to draw the attention of our naval and military authorities, to the description of revolving armracks invented by an officer of the American Ordnance Department. There appear to me features about these rifle and revolver racks, which are worthy of consideration by those who fit up arm-racks on board ships of war, in barracks, and in the armouries of our Volunteer forces. I therefore reproduce the American Ordnance Board's details of construction, together with the drawings, so that our naval and military readers may consider whether this invention of Lieutenant Flagler cannot be rendered available for improvements in the setting up of arm-racks for the British services.

EDITOR.

### REPORT.

Numerous improvements have been made in these armracks since the publication of Ordnance Note of May, The most important of these are the following, viz.:—The rifle-rack has been made larger. A new locking device for greater convenience in locking and unlocking has been substituted for the old device. A middle disk has been added to the carbine-rack, and the locking bands have been transferred to this disk, to prevent removal of carbines by taking out the tang screw and slipping up the The box part proposed by Col. J. McAllister, Ordnance Department, has been substituted for the five round sticks to give greater strength and stiffness. The suggestion made by Major F. H. Phipps, Ordnance Department, that a revolver-rack should be added to the carbinerack, has been adopted, and I have devised a revolver-rack and combined it with the carbine-rack. An economical method of constructing the carbine-rack with a box post, especially with the added revolver-rack, has been devised, and this rack is now made with this post.

### DESCRIPTION.

The rifle-rack is shown on Plate I. The combined carbine and revolver-rack is shown on Plate II. Fig. 1. Plate III., shows the method of constructing the revolverrack, and of attaching it to the top disk of old carbine racks now in service. Although the details of construction are sufficiently shown in the drawings, the following VOL. II.

description may be of use in the manufacture of the racks:-

Details common to both rifle and carbine racks.

The feet, a, a, wrought iron, to be screwed to barrack

Bottom disk, A: Three thicknesses of poplar plank glued together, grain of wood crossing at right angles; twenty triangular pieces 1-inch poplar, b b b, to separate butts of arms; c, band of  $\frac{1}{8}$  by  $1\frac{1}{4}$  inch wrought iron, secured by twelve No. 10 wood screws, with heads filed off to bottom of slot, and flush with band to render unscrewing impossible.

Box post, B: 1-inch pine glued and nailed together, 3 feet 10 inches long for rifle-rack, 3 feet 11 inches long for combined carbine and revolver-rack, grooved into bottom disk of both racks and into top disk of rifle-rack.

Assembling rod, C: g-inch wrought iron, countersunk hole in bottom disk, filled with wood to prevent removal of nut.

Locking bands, D: Of wrought iron, covered with black collar leather to prevent marring the arms; dimensions and details of hinges h, hinge irons f, stay irons e, and locking device are shown on drawings; d is a notch  $\frac{1}{2}$  inch deep, which catches the locking band when pushed through slot, and holds it until padlock is put in. The hinge irons are fastened with two rivets running through both irons and disk.

### Rifle-rack.

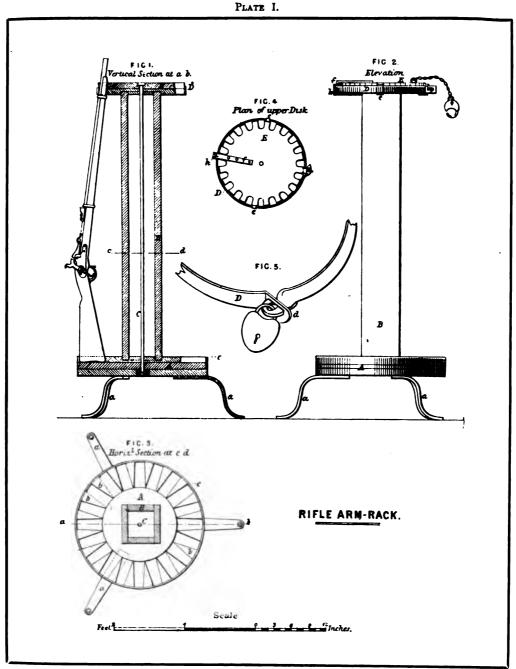
### (Plate I.)

Top disk, E: Two thicknesses of poplar plank glued together, grain of wood crossing at right angles. This disk has the locking bands.

Bill of materials for one rifle arm-rack.

### MATERIALS.

- feet  $1\frac{1}{2}$  by 24 inch poplar; top and bottom cleats, &c.
- feet 1 by 14 inch pine, box post.
- 1½-inch No. 14 wood screws.
- 11-inch No. 10 wood screws.
- 3-inch No. 8 wood screws.



- brass padlock, Romer No. 69.
- ounces glue.
- 11 pounds paint and varnish.
- iron lock band,  $1\frac{1}{2}$  by  $\frac{1}{8}$  by 48 inches long.
- iron bottom band,  $1\frac{1}{2}$  by  $\frac{1}{8}$  by 73 inches long.
- iron hinge pins, 3 inch round, 5 inches long.
- iron hinge straps, 1 by  $\frac{3}{16}$  by 10 inches long.
- 1 iron bolt, \(\frac{2}{3}\)-inch by 4 feet 2 inches long.
- 3 iron feet, 1½ by ½ by 45 inches long.
- iron clips, \frac{3}{5} by \frac{1}{5} by 9 inches long.
- pounds scrap collar leather.

0.05 ounce thread.

0.005 ball wax.

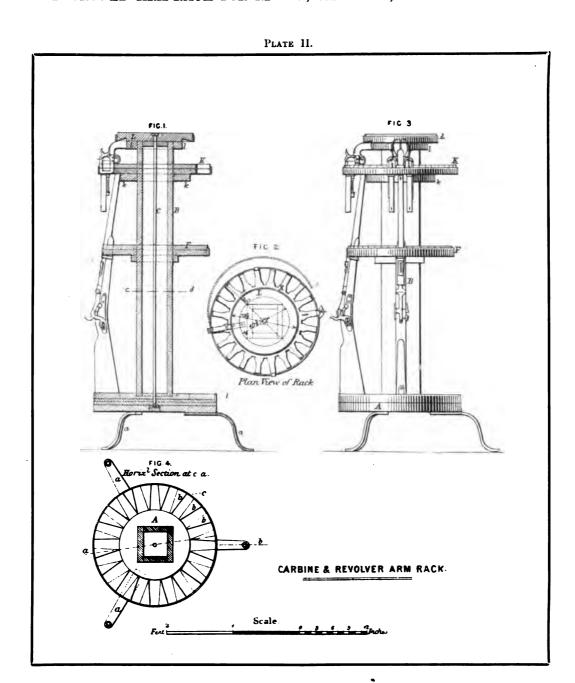
Weight, 54 pounds.

Combined carbine and revolver-rack.

(Plate II.)

Middle disk, F: Two thicknesses of poplar plank glued together, with grain of wood crossing at right angles with square hole cut out of centre to take the box post. 11, strips of poplar glued and nailed to box post support the disk which is nailed to them; notches in this disk fit carbine closely just on top of band, to prevent band from being slipped up. This disk carries the carbine locking bands.

Revolver disk, K: Two thicknesses of poplar plank glued together, with grain of wood crossing at right angles; is supported by and secured to strips k, similar to



middle disk. The notches in this disk are made to fit snugly both Colt's and Schofield, Smith and Wesson revolvers, calibre '45, in the position shown in the drawings. This disk carries the locking bands for the revolvers, and also prevents carbines from being lifted.

Top disk, L: Two thicknesses of poplar glued together with grain of wood crossing at right angles, nailed to strips l and l, which are nailed and glued to box post. Disk is notched, and strips l form a circle to fit snugly against butts of revolvers. Disk is secured by wrought-iron band  $\frac{1}{8}$  by  $\frac{3}{4}$  inch, fastened by wood screws similar to bottom disk.

Bill of materials for one combined curbine and revolver-rack.

### MATERIALS.

- 39 feet  $1\frac{1}{2}$  by 24 inch poplar, bottom, middle, and upper disks.
  - 4 feet 1 by 14 inch poplar, top and partitions.
  - 11 feet 1 by 14 inches pine, box post.
  - 12 11-inch No 14 wood screws.
  - 30 1½-inch No. 10 wood screws.
  - 6 3-inch No. 8 wood screws.
  - 2 brass padlocks, Romer No 69.
  - pound glue.

2½ pounds paint and varnish.

- 1 iron top band, \( \frac{3}{4} \) by \( \frac{1}{8} \) by 44 inches.
- 1 iron revolver band,  $1\frac{1}{2}$  by  $\frac{1}{8}$  by 72 inches.
- 1 iron middle band,  $1\frac{1}{2}$  by  $\frac{1}{8}$  by 68 inches.
- 1 iron bottom band,  $1\frac{1}{2}$  by  $\frac{1}{8}$  by 73 inches long.
- 4 iron hinge pins,  $\frac{3}{16}$ -inch round, 9 inches long.
- 4 iron hinge straps, 1 by  $\frac{3}{16}$  by 20 inches long.
- 1 iron bolt, § inch by 4 feet 2 inches long.
- 3 iron feet,  $1\frac{1}{2}$  by  $\frac{3}{8}$  by 45 inches long.
- 6 iron clips,  $\frac{3}{4}$  by  $\frac{1}{8}$  by 18 inches long.
- ·74 pound scrap collar leather for revolver-rack bands.
- '044 ounce thread, revolver-rack bands.
- '003 ounce wax, revolver-rack bands.
- 1.87 pound scrap collar leather for carbine-rack bands.
- ·046 ounce thread, carbine-rack bands.
- '004 ounce wax, carbine-rack band.

Weight, 77 pounds.

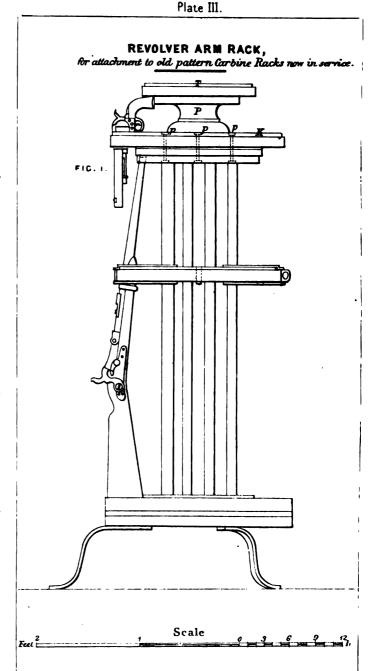
Revolver arm-rack for attachment to old carbine rack now in service.

### (Plate III.)

The revolver-rack disk K is the same as the revolver-rack disk K of the combined carbine and revolver-rack. The top disk T, and the post P, are made of poplar turned to shape shown in the drawing. The bolts p p are issued to company officers with the rack.

To attach the revolver-rack to carbine-rack place it on top disk of carbine-rack and mark positions for bolt-holes so that revolvers will come opposite intervals of carbines. Bore the holes in carbine-rack top disk, put in bolts with nuts below, and rivet up head of bolt to prevent removal of nut.

Weight of revolver-rack, 11 pounds.





### EDITORIAL.

### OUR GUN ARMAMENT.

In my concluding remarks last month I said I would state how Lieut.-Colonel Eardley-Wilmot endeavoured to place his country beyond the reach of a repetition of the national disgrace inflicted during the Crimean War upon the British nation through a dependence upon contractmade gun armament; how he succeeded by tremendous efforts on his country's behalf, and "how things were worked" by which he was so unjustly dismissed from his post of Superintendent of the Royal Gun Factory, in order to introduce the manufacture of the breech-loading Armstrong guns; how "things were worked" during the Armstrong gun era; the result of the failure of these guns, and the way in which the country was involved in the loss of over £3,000,000 of public money. I further stated that I would show "how things were worked" to bring in the Woolwich gun, the results of the introduction of this nature of ordnance, and the consequent necessity for a better description of armament, and "how things are now being worked" in connection with this necessity.

My first task is, therefore, to state what Lieut.-Colonel Eardley-Wilmot did, to place his country beyond the evil results which came upon the nation through a dependence upon contract-made guns, both in regard to the quality supplied, and the price which the nation paid for its

ordnance.

If my memory serves me correctly, it was in the early part of the year 1856 that designs were got out for building the present Royal Gun Factory by Mr. Murray, the Building Engineer to the Royal Arsenal appointed by Lord Panmure during the last part of the Crimean War, and by Lieut.-Colonel Eardley-Wilmot. The designs were submitted, and Mr. Monsell, the Parliamentary Under Secretary for War, who warmly approved of the gallant Lieut.-Colonel's scheme to enable the War Office to make its own guns, and to form a standard factory, quickly gave his consent to the proposal, and approved of the submitted designs. He procured the sanction of the Treasury for a certain amount of money to be expended during the first year's building operations.

Armed now with the necessary authority, and in possession of the requisite funds, Lieut.-Colonel Wilmot energetically pushed on the building work. He designed, with the assistance of his able manager, Mr. William Keate, a most experienced and scientific engineer, ample boring, turning, trunnioning, shaping, and other machinery, and all the necessary shafting and boilers. The Colonel and Mr. Keate designed furnaces, casting pits, and every The Colonel other arrangement for commencing operations as soon as the buildings were ready. Under Mr. Murray's personal superintendence the buildings were quickly yet solidly erected. Before the year was out a noble pile of buildings was seen standing out in bold relief, as a monument of rapid energy. The powerful machinery that soon arrived

and was ready to place in position, told of consummate skill in design, and of a high appreciation of the vast enterprise in which the Superintendent had embarked. Every arrangement was on a basis commensurate with the magnitude of the object to be sought for, namely, the formation of a standard factory which would enable the government of Great Britain to be to a very great extent independent of ordnance contractors, and to control these contractors' prices in a manner which would in future prevent the nation from being systematically plundered either in time of war or peace.

From early morning till late at night, the gallant Superintendent and his energetic manager were hard at work. Two or three of the Colonel's staff of officials, fired by his excellent example, stood to him right well. He had told them of his objects, and how he proposed to carry them into execution. They knew their chief was on the right track; they travelled it with him con amore. All associated with Colonel Eardley-Wilmot in his great work felt a degree of justifiable pride when they saw the Royal Gun Factory prepared to receive the machinery awaiting its placement. There, before them, stood the magnificent buildings—solid, imposing, the results of surprising energy and skill in a national cause. There, too, was the heavy machinery, ready for the foundations on which it was to be placed.

The first part of a great national work was accomplished. The second part remained, namely, to complete the task

these men had undertaken.

I must now state that Colonel Boxer, the Superintendent of the Royal Laboratory, had taken over the examination of the supply of shot and shell. He had found that the diaphragm shells of his own design had cost the country by contract about 70l. per ton! He was equally with Colonel Eardley-Wilmot impressed with the results of contract supplies of shot, shell, and other ammunition. He, too, had procured permission to erect that splendid building, the present Shell Foundry, with similar objects to those of his brother-officer of the Royal Gun Factory. It is as well to here state, that Colonel Boxer turned out identical diaphragm shells in this building with those of contract, at a cost of a little over 20l. per ton. The money the shell foundry of the Royal Arsenal has since saved this country in the supply of shot and shell cannot possibly be calculated.

I must not digress from my particular subject, however, beyond saying that the other factory, the Royal Carriage Department, followed suit with similar objects, and procured permission to erect suitable buildings for an extension of War Office manufacture. I shall have something to say later on concerning the wrongful way the work has been taken from this factory and given to particular contractors for particular motives, to the severe loss to the national exchequer.

The first results of the hard work for the great object

in view in the Royal Arsenal were intensely discouraging to those who had striven so hard to gain them. There are few, either in or out of the service now, who remember these results, and few people, on looking at the Royal Arsenal of to-day, would imagine the shock received by most of those who had been instrumental in erecting the buildings contained in Britain's great warlike emporium. There are not many who would believe that there is a painful history connected with these buildings. I will relate it. And it is worth telling, because it shows the faith that can be put in officialism at the War Office.

One morning, just towards the close of the official year in which the buildings were erected, Colonel Wilmot sent for a young officer of his staff, who had been closely associated with him in the re-organisation of the Royal Gun Factory department, and in getting together the machinery, &c., for the new buildings. The Colonel said:—

"I wish you to go to the War Office to-day and see Sir Benjamin Hawes. I have written him a letter, the contents of which please to read. You are as well acquainted with these contents as I am; if, therefore, any questions are put to you, answer them clearly and fully. Mr. Murray, as you perceive, has much exceeded his estimates for the new factory, and it will be necessary to procure the Treasury assent to cover the expenditure of the increase. I fear he has also exceeded his estimates for the buildings for the Laboratory and the Carriage Departments—but he has done the work well, and most satisfactorily to all the Superintendents. He may, however, receive a rebuke for not having sooner conveyed to the War Office the circumstances through which the excess has occurred, and it will doubtless be a lesson to him in future, that he must give timely warning of his exceeding any estimate, and that he must not leave it until almost the last moment for the Treasury assent to be obtained."

The young official went to the War Office; he saw Sir Benjamin Hawes. This Under Secretary read the Colonel's letter. With his usual imperious manner, this ex-Parliamentary agent sharply interrogated the bearer of the communication. His questions were replied to promptly and clearly. The whole matter was concisely explained to Sir B. Hawes, who then stated to the young official, that this was not the first letter he had received upon a similar subject, that the matter was very serious, that he would have to go down to the Treasury that very day to procure the necessary sanction for the excess, on behalf of the three manufacturing departments.

"Wait here," said this high functionary with much asperity of manner, "until I return from the Treasury, and take back my answer. Mind, don't leave the War Office until you get my letter to your Chief."

The young officer did wait all day, or rather until five o'clock P.M., when, not receiving from Sir B. Hawes the expected answer, he went to the War Office clerk whom he knew would fairly write it out for Sir Benjamin Hawes's signature. The War Office clerk was in the act of preparing the letter.

"Oh," said the War Office clerk, "you are waiting for this—it is a hot one, I can tell you. You may read what I am writing, if you like—you know all about the matter." The young officer looked over the War Office clerk's shoulder, and did read, and as he perused the document, so was he painfully astonished. He knew that the walls of the War Office had ears; he wisely held his tongue. He saw the War Office clerk take the letter off to Sir B. Hawes. The clerk returned with the letter signed, blotted the still wet signature, folded up and directed the reply, and silently handed it to its bearer, who almost as silently wended his way to the quarters of his Chief in the Royal Arsenal.

"Well —, have you brought the answer?" was the Colonel's first question.

"I have, sir," was the reply, "and it is a very serious one."

The Colonel changed colour. His features worked a little as he opened the envelope and looked at the letter's contents. He read the communication calmly, turned to his aide, and said with a face pale from strong emotion—

"You know ----, what this letter conveys?"

"Yes, sir," was the answer.

The reply was Mr. Murray's summary dismissal from the service!

The Chief and his young and trusted assistant stood for several moments face to face, looking one at the other, sad and silent, before saying "Good-night."

How could either know that after the most scandalous intrigues later on, the taller and older of the two, the Chief, was to receive a similar dismissal at the instigation and at the hands of the same man as he who had so ruthlessly dismissed the able and energetic Building Engineer!

Before proceeding to relate the scandalous proceedings in connection with placing the gun armament of this country in the hands of a private designer and contractor, and which led to Colonel Wilmot's more than improper dismissal through the animosity and intriguing character of the functionary who dismissed the official that built the Arsenal at Woolwich, I will state the position in which Colonel Wilmot placed the Royal Gun Factory to manufacture ordnance, before it was, as soon as he was dismissed, seized upon in furtherance of gigantic schemes for self-interest and aggrandisement.

EDITOR.

THE value of the patent fire-proof paint of the United Asbestos Company has been deemed worthy of a certificate from the Executive Council that all wooden buildings erected in the grounds of the Health Exhibition were coated with it, thereby lessening the liability of such buildings to take fire. This should be brought under the notice of the military authorities for the better preservation of wooden huts, stables, &c.



### REVIEWS OF BOOKS SUITABLE FOR NAVAL AND MILITARY LIBRARIES.

The Victoria Cross Heroes, and How they Obtained it. Crimea to Zululand. By Lieutenant-Colonel W. KNOLLYS and Major W. T. ELLIOTT. London: Dean and Son, 160a, Fleet Street.

This book is a complete history of the Victoria Cross and the wars in which it was won. It appropriately commences with the history of those who obtained it in the Crimea, 1854—1856. The next division gives an account of those who won this much-coveted honour in the wars of Persia, China, Abyssinia, Khortan, New Zealand, Andaman Islands, &c. Then follows the Indian Mutiny, with a graphic account of the engagements and hand-to-hand encounters, showing how the Victoria Cross was won in those terrible times. We are next taken to Afghanistan and on the Frontiers of India during the years 1877-1880, a chapter which includes the names of such distinguished recipients as General Roberts, General Sir W. Brown, and Captain Cook. Then follow South Africa during the campaign of 1879, including the historical names of Chard and Bromhead, and an exceedingly interesting account of how Lord William Beresford obtained this high mark of military distinction—which had additional lustre added to it from the fact that he received the Victoria Cross from the hands of Her Majesty herself at Osborne House prior to his Lordship's return to India.

Both Colonel Knollys and Major Elliott are known as excellent writers, who have a happy gift of marshalling forth historical facts with accuracy and without exaggeration. We can confidently recommend this book to parents and guardians, in the belief that no more acceptable present as a New Year's Gift could be given to boys than these records, showing how the Victoria Cross was won both by soldiers and officers of the Army, seamen, midshipmen and captains in the Royal Navy. Should another edition be called for—which is highly probable—we hope some of the pictures illustrating the history of the Victoria Cross by the Chevalier Desanges may be reproduced in the work, and that for the convenience of readers it will be published in two volumes.

General Count Todleben, his Life and Works. By Lieutenant-General A. BRIALMOUT. Published by Librairie Militaire, Muquarett, à Bruxelles.

Lieutenant-General Brialmout has in a short, concise, and readable manner, given us an account of the life and works of this great Engineer Officer.

Todleben was born May 8th, 1818. He early evinced

Todleben was born May 8th, 1818. He early evinced a very decided taste for the career of a soldier, and especially for engineering works. In 1832 he entered the School of Military Engineering, which is at present called l'Ecole Nicholas.

His delicate state of health (he suffered from a chest affection) twice obliged him to leave the school and return to his family, but not before he had obtained the rank of Sub-lieutenant.

Wishing to become familiar with the working of the sappers and miners, he in 1839 asked and obtained permission to join a battalion of sappers then encamped near the fortress of Danabourg. The year following he was

drafted to the battalion of Engineering Instruction at St. Petersburg, and the year after obtained the rank of Lieutenant and was congratulated on his works by General Schilder; who became from that time his protector and friend, and in 1850 had him appointed his Aide-de-Camp, Todleben being then First Captain.

When the war in the East burst forth in 1853, General Schilder, who was elected to the Army of the *Principality or Territory*, proposed to his former Aide-de-Camp to join him again, an offer which Todleben accepted with eagerness. He was appointed Lieutenant-Colonel in 1854; and a few weeks after was sent to study the fortifications of Kalafat, and to point out the means of seizing the position which was occupied by the enemy. He accomplished for this purpose a series of the most daring reconnaissances.

General Count Todleben was as amiable and charming in private life as he was brave and accomplished in the field, and he justly won the confidence and esteem of his Emperor, his superiors, and his countrymen; who were proud to see the distinctions which were showered on him, and to know that even the brave men who fought against him ungrudgingly acknowledged his genius.

How Todleben kept the allied forces at bay for upwards of twelve months is an imperishable monument of his skill and inventive genius, and has afforded the historical writers of the war the privilege of narrating that great military chapter—the siege and fall of Sevastopol. Those who follow with interest the career of this great soldier will obtain much information from the perusal of General Brialmout's well-written and interesting biography.

Reconnaissance and Scouting. By Captain R. S. BADEN-POWELL, Adjutant, 13th Hussars. London: William Clowes and Sons, Limited.

One good result of the Franco-German War was that we had forcibly brought under our notice the enormous advantage given to an army in the field by the possession of intelligent and well-trained scouts, without which a general is somewhat like Sampson in his blindness—powerful enough, it may be, to destroy the enemy's position, but very likely to bring destruction on himself in the attempt. Captain Baden-Powell's work—a practical course of instruction for officers, non-commissioned officers and men—is a simple and comprehensive grammar of Reconnaissance, calculated to be of service both to an instructor and his class.

Remarks on the Discipline of Candidates for the Army, with Suggestions for its Improvement. By Lieutenant-Colonel GRAHAM. (Second edition.) London: Harrison and Sons, Pall Mall.

Colonel Graham's brochure has most deservedly met with such favour that a second edition has been called for. His untiring exertions in the cause of an improved system of military education are well known, and we are confident will bear good fruit in the Military and Civil Service College now being established at Castle Hall, Milford Haven. We commend the pamphlet to the

careful perusal of all who take interest in the moral culture as well as the educational training of students preparing for Woolwich, Sandhurst, the Indian Civil Service, &c., knowing how much depends on early impressions if a man's career is to be the noble one of a good servant to his God, his Queen, and his country.

### MILITARY BIOGRAPHIES.

- 1. Frederick the Great. By Colonel C. B. BRACKENBURY, R.A.
- 2. Loudon: A Sketch of the Military Life of Gideon Ernest Frehein-Von Loudon, sometime Generalissimo of the Austrian Forces. By Colonel G. B. MALLESON, C.S.I. Author of "The Decisive Battles of India," &c. London: Chapman and Hall (Limited). 1884.

These two volumes are the first of a series of Military Biographies about to be published by this firm. The lives of such men as Frederick the Great and Loudon are full of interest, both from an historical and warlike point of view; and the contrast between the characters of these two men of military genius cannot but excite the keenest sympathy and interest in the mind of every reflective military student, while the attempt to draw a military parallelism between these soldiers should be their highest

To Colonel Brackenbury has been entrusted the important task of writing Frederick's biography, and throughout the pages evidence not only ability to write military history, but to place the various tactical dispositions and great daring which Frederick employed in his campaigns in a clear light, so that the general reader will with the aid of the maps have little difficulty in following the series of operations propounded and carried out by this great master of the art of war. If space permitted we could give many extracts showing the genius and character of Frederick from many points—his affection and love for his mother and sister, the latter his chief correspondent through life; his magnanimity—never more nobly displayed than when the day after the battle of Kesseldorf "the king came up, and at sight of Leopold, dismounted from his horse, doffed his hat, and advanced to meet the old man with open arms. The bright designer of new methods of war honoured the master of the old ways which he was displacing." Again, the confidence and affection that the soldiers reposed in him: "Good night, Fritz," was always the parting word of the soldiers

"This was Frederick's to the General they trusted. method with his officers and men, it was also Marlborough's and Napoleon's. Who can find a better bond than this kind of familiarity, which goes well with the sternest discipline?" And further on the author writes, "Not by military forms alone, however good, but by cultivating a true and steady flame of trust and large enthusiasm amongst his men, were won the chief victories of Frederick the Great. And even when he failed, his men still believed in him and recovered themselves quickly." These remarks are as applicable to soldiers of the present day as in those times. The publication of this volume will be recognised as a boon to the military student, and historical collaborators, in that it contains the History of Frederick the Great and the Seven Years' War, written with clearness and perspicacity, minus the criticisms, sometimes unfair if not inaccurate, to be found in the magnum opus of Carlyle.

The life of Loudon is essentially the history of a soldier, who, with everything against him-obscure parentage, want of patronage, to say nothing of the opposition and jealousy he met with throughout his career—not only raised himself to the highest rank in his profession, but successfully opposed the greatest captain of the period. "Whenever they met," says Colonel Malleson, "Loudon, except on one occasion, always had the advantage. It was Loudon who forced Frederic to raise the siege of Olmutz who beat him at Kunersdorf, who for a month, with an inferior force, barred to him the road into Silesia, who planned Hochkirk, who took Schweidnitz under his very nose. Even in the solitary exception, Liegnitz, in which the brilliant conception and quick movements of Loudon were made resultless by the dilatoriness of Daun and the want of enterprise of Lacy, he gave Frederic, as Frederic declared to his generals, a lesson in the art of drawing off an army." The life of Loudon should be read in conjunction with that of Frederic; by doing so the characters and action of both will be better appreciated and understood. There can be no question that this book will be largely read by soldiers of all classes. Colonel Malleson, while strictly confining himself to historical facts and data, has invested the life of Loudon with all the charm of an historical romance, while the most convincing testimony to Loudon's genius may be found in the remark of his great rival who, when talking over the events of the war with his generals, exclaimed, "We all of us made mistakes except my brother Henry and Loudon."

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FEBRUARY 2nd, 1885.

Vol. 11.

### OUR FRONTISPIECE.

### THE TENTH HUSSARS AT EL TEB.

"Your hands on your sabres-how should you fail?"-BYRON.



HE land of Egypt, from the dawn of its history until now, has been the grave of many military reputations. But it has also been the theatre of great military successes. The old proverb about events repeating themselves has been verified more than

once during the troubled times of the last few years in which England, with the very best of intentions, has found the Egyptian question as difficult to solve as Moses did in the days of bondage. Diplomacy has tried to bring about a solution without the aid of the sword, but whether the pen was a bad one or was too feebly grasped, the result was that, for the moment, it had to be thrown aside and the sword unsheathed. Into the political questions which are still agitating Europe respecting the conduct of England in the affairs of Egypt, it is scarcely the province of a "Service" journal to enter. Soldiers and sailors should be patriots, not politicians, and it is only with matters affecting the interests and good name of the "Services" that this magazine would deal. However conflicting or obscure were the opinions of Statesmen at home about English policy in Egypt, there was no clashing of opinions or obscurity about the way in which English troops have done their duty in that country. Amongst a number of cynics, it was not to be wondered at, that sneers should have been raised which endeavoured to make little of the fighting done and of the difficulties encountered by the English commanders, and by the forces under them. Only ignorant or careless readers of criticism, could have forgotten what a difficult "field of fight" Egypt has ever been to some of the best of soldiers. Buonaparte did not find it an easy one, although assisted by such

generals as Kleber, Lanner, Berthier, Dessaix, Davoust, Marmont and Murat, and the expedition of 1798 for which he has been credited with so much praise, was a much simpler task than that which Wolseley had to undertake in 1882. The actions of Tel-el-Mahuta, Kassassin and Tel-el-Kebir were more sanguinary than those of El-Rahmângeh, Chobra Keit and the Pyramids. But the old tale of varying fortune has continued to be the story of warfare in Egypt to the latest hour that we have record of. At present the star of success appears to be in the ascendant, but at the moment represented in the picture, a copy of which forms the frontispiece to the current number of this Magazine, that star was very much clouded over indeed.

In the spring of 1884 the rebels against the Egyptian Government had gained great successes over the gallant defenders of the towns of Tokar and Sinkat, who for several months had withstood a very determined siege. Two expeditions to relieve the former place had utterly failed, although one of these expeditions had been commanded by a no less distinguished officer than Baker Pasha. He had done all that man could do to win success, but treachery and cowardice were fees too strong for him, and so he "nobly" failed. The rebels, flushed with success, and in possession of good arms and munitions of war, took up a strong position near the village of El Teb on the direct road from the coast to Tokar. An English force under General Graham organised with the object of retrieving the late disasters, went out to attack the enemy. How the attack was carried out is a matter of history, but our business is only with the picture in which Major G. D. Giles, himself a gallant sharer in the day's honours and dangers, tells the stirring story of the work which the 10th Hussars had to do, and did.

There is an ancient legend about the exclusiveness of the regiment which has always held so high a name in the records of the English Army. It was said that "The

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10th don't dance," "The 10th don't do" this-or thatbut it was never hinted that "the 10th don't fight." And how they fought at El Teb, is worth the telling by the brush of the painter and by the pen of the historian. Three squadrons had to meet and to first encounter an enemy of not less than 10,000 strong, brave as fanatical wild followers of the Prophet have always proved themselves to be. An eye-witness of the scene, wrote of them that "they showed not the faintest vestige of fear or indecision; the men on foot lay in the shelter of the hillocks and mounds of sand, which though small to the eye were effective, and rising as the horses leapt over them or swerved aside, drove home their heavy spears, throwing them where they were unable to reach their foe by hand. The spears were Zulu assegais in form, except that being weighted with a roll of iron at the extreme end of the shaft they had a greater momentum and piercing power."

The Hussars were not mounted on horses—but really on ponies. They had been stopped at Aden on their way home to England after twelve years service in India, and horses and saddlery had been left behind. They had therefore to do their best with the small Egyptian horses and incomplete saddlery handed over to them by the

Egyptian Gendarmerie. But they made these diminutive horses do wonders—over-weighted as they were, and without water all day. After a gallop of three good miles, they were still able to go in and out amongst the enemy for two hours of hard fighting, whilst their riders were engaging in hand-to-hand combats with foes whose courage and determination were incredible.

The 10th lost in this encounter two officers and four men killed, one officer and twenty men wounded, besides numerous horses killed and disabled. Major Slade, as fine a fellow as ever led a squadron, fell early in the day, his body pierced with seven spear wounds.

The picture by the gallant artist, represents one of the most thrilling incidents of the day, when the courage and coolness of Lord Alwyn Compton saved the life of a sergeant whose horse had fallen, and who would have become a victim to the surrounding savages but for this timely aid.

The picture itself has been purchased by subscriptions from H.R.H the Prince of Wales (Colonel of the regiment) and the retired officers of the corps and presented to the Mess, as a reminiscence of a "hard day's work" done by the gallant "10th."



### ANNIVERSARIES OF BRITISH VICTORIES.

### THE CAVALRY ACTION AT ASHTI, IN 1818.

On the 13th of February 1818, a cavalry brigade, under Brigadier General Lionel Smith, C.B., started from Satara in pursuit of the main body of the Peishwah's cavalry. The brigade consisted of two squadrons of the 22nd Light Dragoons, the 2nd and 7th Madras Native Cavalry, and a troop of Bombay Horse Artillery. Early in the morning of the 25th General Smith came in sight of the Mahratta Horse, and at once began to form for attack. The ground was rugged, and almost impassable in some places, and the movements were consequently impeded. When only three troops of the 7th, who were on the right, had formed line, Gokla, a celebrated cavalry leader and the Peishwah's best officer, at the head of 2,500 horsemen, charged diagonally across the front to the right; threw the 7th into confusion, but inflicted little loss, and then swept round the right flank, intending to attack Smith's regiments from the rear. Major Dawes commanding the centre regiment, the 22nd, rapidly changed front to the right, and charged along the rear of the 7th with such impetuosity that Gokla's horde was utterly routed. That formidable leader received three pistol-shots and two sabre-cuts, and "foremost, fighting, fell." The rout of his horsemen then turned into a headlong flight, and they were pursued for five miles. From the nature of the ground and the closeness of the enemy, the Bombay Horse Artillery who were on the right, were almost precluded from firing, but a few galloper guns on the left did some execution. The Mahrattas are said to have had 200 killed, while Smith's brigade had only fifteen Europeans and five Sowars killed and wounded, including General Smith who received a sabre cut on the head, and an officer of the 22nd who was wounded in personal conflict with Gokla.

The accounts of this action are discrepant as to the number of Mahratta Horse actually engaged, and the number of them that were killed. In these and some other points, I have followed Blacker, who is most circumstantial, and from his official position, most likely to be accurate.

The Regiment of Light Dragoons that fought at Ashti was raised in 1794 as the 25th. In 1802, when the three Dragoon Regiments next before it were disbanded, it became the 22nd. This Regiment took part in many a hard fight in India and Java. It was disbanded in 1820.

### THE ERA OF MACHINE GUNS.



HILE in naval circles it is in dispute whether
the ram will beat the torpedo, or the gun
will beat the ram, or one weapon will beat
the other two and reign supreme, there is
no dispute anywhere as to the position of

the machine gun. It never claimed complete empire, but it bids fair to have a finger in every pie. It is only in the land service, or rather it is only in the marching army, so to speak, that its advance hesitates and stumbles, but even here abundant signs appear to the philosophic, to assure them that the high road to favour will soon be free to it.

The floodgates of machine-gunnery being thus opened, the time is opportune for considering whither the waters are likely to carry us, and to note such rocks and shoals as might divert the main stream from its legitimate and proper course.

I am not quite sure whether the term "machine gun" is not to some minds a trifle misleading; preventing them from perceiving what the real meaning of the movement in their favour comes to. I judge that the whole thing is simply a growing demand for increased rapidity of fire, which is being met in a great variety of ways, and that what are called "quick-firing guns" are to all intents and purposes equally to be classed as "machine guns" with five-barelled '45-inch Gardners, four barelled 1-inch Nordenfeldts, and with the Gatling, Hotchkiss and other revolvers. In the first and broad light by which they should be viewed, their differentiation lies in the relative number of bolts of a given calibre which they can put into a given target in a given time. Multi-barrels do not form so much a principle of the machine gun as a device for securing either a powerful volley at each discharge, or else, as in the case of some of the revolving weapons, a guarantee against undue heating. But in all cases it is the rapidity of the effective fire which in the first instance differentiates the weapons.

The slowness of the fire of the old muzzle-loading Minie rifle led directly to the invention of the needle gun; and the desire of beating the speed of fire of the needle gun, the Chasse-pot, the Snider, and the American breech-loaders, led up directly to the Mitrailleur and the Gatling. It was but difference of detail that one of these fired volleys, and the other poured forth bullets like water from the fireman's hose. The intention was the same; a greater number of rifle bullets striking a given target in a given time. Thus again, when we contemplate the beginnings of "quick-firing guns" of heavier calibre than such as are commonly spoken of as machine guns, we observe that they are only following the precedent already set by the needle

gun and the Minie rifle. The needle gun got its mastery in rapidity over the old rifle by opening the breech and putting the firing apparatus with the powder and the bullet all in one cartridge. The quick-firing gun finds its breech already open, and has nothing to do but to make up the cartridge and insert it. With the ordinary breechloading gun the time is lost, because every cartridge has to be made up at the gun before firing. The bolt must be first pushed home, the powder bag after it, the breech must then be closed, and the firing apparatus inserted. In the quick-firing gun, this is all done beforehand, and the cartridge central fire complete-of such as one takes out of one's belt on the 1st September, only larger—is pushed into the breech and fired. Did we press matters a little further, we might almost say that the Hotchkiss ought to have come after the more modern "quick-firing gun' instead of before it in time as it did, for the Hotchkiss is a large calibre shell gun into which the cartridge is mechanically dropped, and of which several barrels are grouped together, chiefly perhaps to avoid the excessive heating, but losing possibly, the rapidity which might be gained by the same number of barrels separately mounted.

Even when we compare the action of the machine gun with that of the heavier gun firing shrapnel, we are not driven from our claim to differentiate the weapons by their relative speed of effective hits. For in the land service, the machine gun stands forth as the direct rival of shrapnel shell, and yet can only contend with it in regard to the number of hits on a given target in a given time which each weapon can obtain. On board ships the machine gun hardly rivals the heavy gun with shrapnel. It rather supplements the heavy gun with its heavy projectile, and does the lighter work which the heavy gun could only undertake uneconomically. For it would be in rare and special cases—probably never against ships -that we could afford to put shrapnel into the heavy gun instead of the shell or the plate-piercing bolt. But if there were a rivalry, a chief element of it would be speed of fire, or rather as explained, speed of hits.

In accepting, then, the era of the machine gun, we have to consider how far a possible rapidity of effective fire may reach towards an actual rapidity, in action. The chief hindrance—all experience shows—will be the smoke. In some ships at the bombardment of the forts at Alexandria, it was found impracticable to continue the machine and great gun fire simultaneously, solely on account of the smoke. The newspaper accounts of the experiments at Inch Keith are not clear as to what the effect of smoke was, but the authorities took a sound view when they caused

blank cartridges to be fired from the heavy guns of the Sultan during the machine gun fire, so as to avoid setting up an ideal standard of effectiveness for the new arm.

We must, therefore, reasonably discount the drill rapidity of fire from a single machine gun, when we picture to allow the target to reappear. Or the guns may be themselves in motion, and may pass out of their own smoke with equal success. In ships at speed, and especially at high speed, this is notably the case; and the management of the effective fire of a ship will greatly depend on her

### THE GARDNER SYSTEM.



GARDNER TWO-BARREL MACHINE GUN, ON CONE MOUNTING, FOR NAVAL USE.

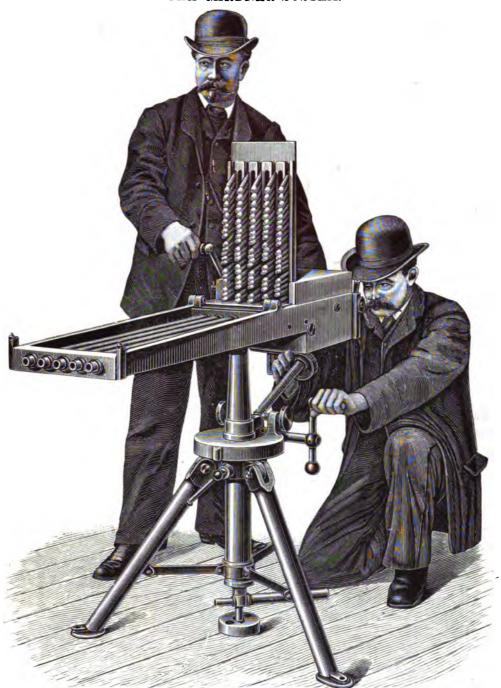
Weight of gun 103 lbs.; of mounting 153 lbs.; calibre '045; rapidity of fire, maximum, 680 shots per minute.

ourselves the actual rapidity in action. But on the other hand we should recollect that two causes may operate with much force to reduce the retarding effect of smoke on machine gun fire. The wind may travel with such rapidity and in such a direction as to speedily clear the front and

rapid movement in such directions as will speedily clear her front of smoke. For land service this running out of the smoke cannot, perhaps, be looked for to any extent, even if Lord Charles Beresford's specification for machine gun mounting were fully carried out. No doubt, then, after the manner of the high range—or "indirect"—firing employed in the Russo-Turkish war, visibility of target may often be dispensed with where both it and the firing point are fixed. But if it is true, as has been stated, that

keep, as against a less skilfully handled one, such a position or series of positions, as will give her the enormous advantage of a continually cleared front, and leave the other as continually enveloped in her own smoke.

### THE GARDNER SYSTEM.



GARDNER FIVE-BARREL MACHINE GUN, ON PORTABLE TRIPOD, ADAPTED FOR NAVAL USE. Weight of gun 235 lbs.; of mounting 134 lbs.; calibre '045; rapidity of fire, maximum, 1200 shots per minute.

the curtain of smoke at Tamai in front of our rifles and machine guns, allowed the Arabs to come in, and rendered the fight so heavy, and at one moment so critical, such a curtain has special evils of its own.

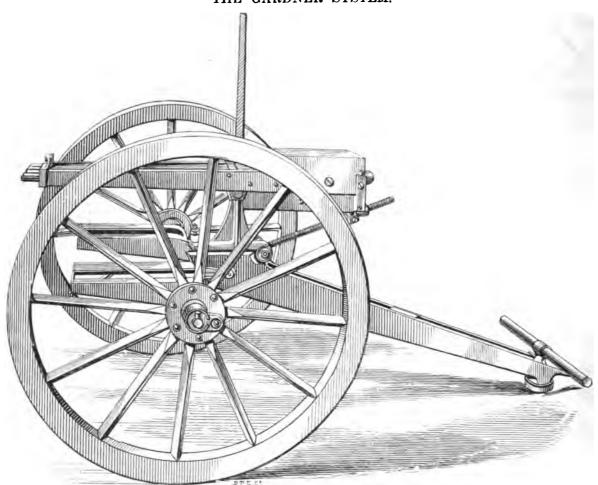
A skilfully handled ship may very possibly take, and

But in the case of machine guns more capable of immense volleys with pauses between — of which the original Mitrailleur is the type—than of the continuous stream of bullets aimed at by the Gatling and the Hotchkiss, the combat between ships offers peculiar facilities. What

used to be called in the old days of the *Excellent*, the 'ships passing on opposite tacks" moment or two, gives at tolerably close quarters a terrific field for the machine gun. If the outlines of ports, exposed machine guns and their crews, are not visible by reason of their own smoke curtains, these very curtains may disclose their whereabouts and draw fire. The opportunity being, however, but momentary, the power of discharging a vast number of bolts with fair chances of hitting is here the all important point, and other things being equal the more rapid fire will win.

within comparatively short range of the ship she attacks. It is reasoned that time—greater or less—must elapse between the moment when the torpedo boat comes into effective machine-gun range, and that of her arrival within effective torpedo range. If she can be hit during this period by a sufficient number of machine-gun projectiles, she may either be destroyed or put hors de combat. Here, then, it is, that the whole question becomes one of effective rapidity of discharge. Absolute safety may be secured to the large ship by machine-gun fire which is effective within a certain closely-limited time. Fatal

### THE GARDNER SYSTEM.



GARDNER FIVE-BARBEL MACHINE GUN, ON MOUNTING AND CARRIAGE FOR FIELD SERVICE.

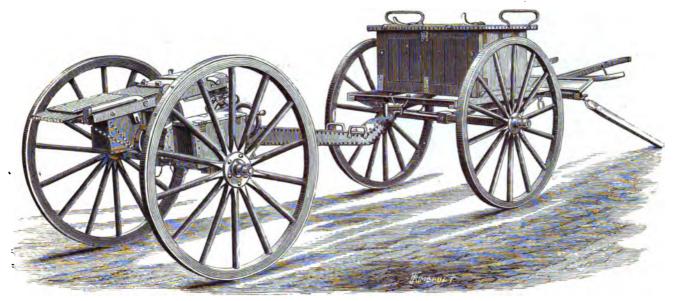
Weight of gun 235 lbs.; of carriage and mount 320 lbs.; calibre '045; rapidity of fire, maximum, 1200 shots per minute.

The naval mind in all nations is set upon the chief use of the machine gun as an anti-torpedo weapon. The power which the torpedo has given to a vessel infinitesimally small as compared with the object of her attack, to deal her enemy a fatal blow, has set us all searching for the means of counteracting such deadly capabilities. And foremost amongst them stands the machine gun. The small torpedo boat is necessarily destructible by very small projectiles, while she must, to deliver an effective blow, be

consequences to the heavy ship may follow any failure within this limit.

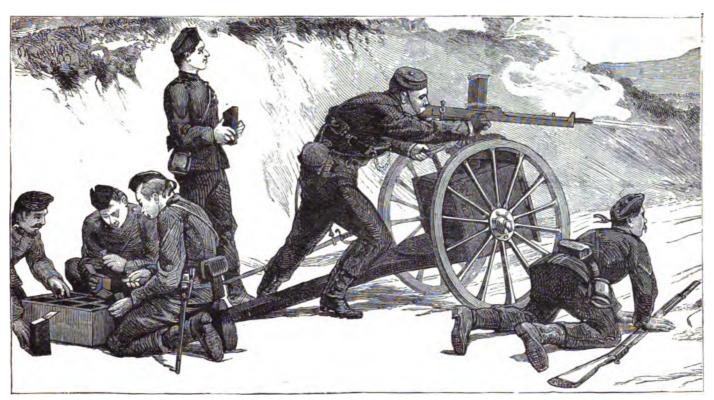
But while this speed of effective fire is the primary point to be considered in differentiating the nature of the various weapons called machine guns, and those which, though not so named, may properly be classed as such, it is clearly by no means the only point. The saving of manual labour in the manufacture of destruction grows continually in importance in modern war. The

### THE NORDENFELDT SYSTEM.



NORDENFELDT TEN-BARREL, RIFLE CALIBRE MACHINE GUN, FOR FIELD SERVICE.

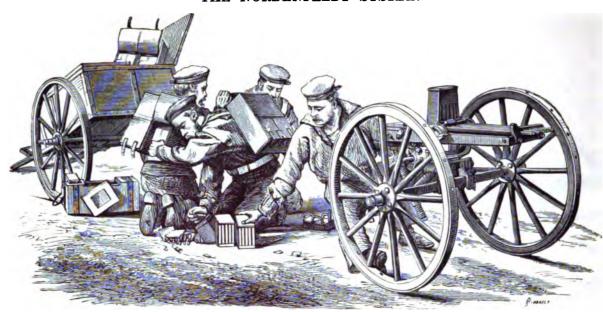
Weight of gun 232 lbs.; of carriage 568 lbs.; of limber, empty 504 lbs.; limber contains 2 distributors and 10 hoppers, 5000 rounds of ammunition and spare parts; each hopper contains 1000 rounds; rapidity of fire, maximum for one minute 1016 shots; 3000 rounds in 3 min. 3 sec.



CENTRAL LONDON RIFLE RANGERS' IN ACTION WITH A NORDENFELDT FIVE-BARREL, RIFLE CALIBRE MACHINE GUN.

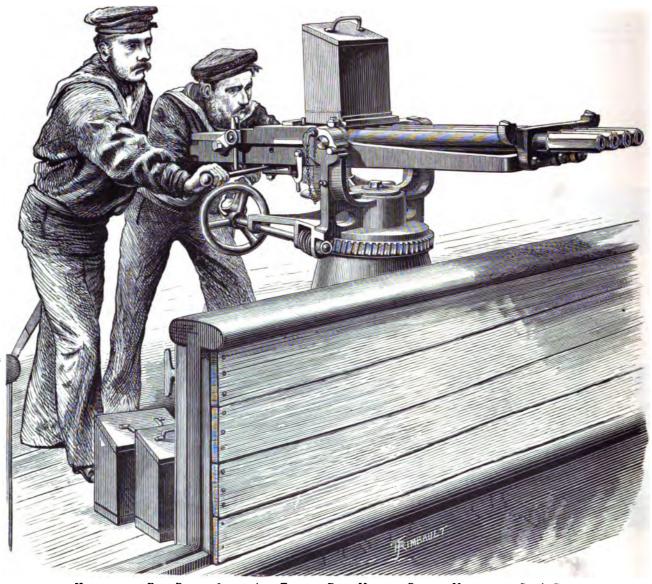
Weight of gun 120 lbs.; of carriage, gun, 1200 rounds of ammunition, distributors, hoppers and spare parts, 9 cwt.; each hopper contains 500 rounds; rapidity of fire, maximum in 1 minute 600 shots; 3000 rounds fired in 5 min. 47 sec. This gun has just had an improved mounting designed for it.

### THE NORDENFELDT SYSTEM.



NORDENFELDT FIVE-BARREL RIFLE CALIBRE MACHINE GUN FOR FIELD SERVICE.

Weight of gun 120 lbs.; of carriage 282 lbs.; of limber, empty, 476 lbs. This gun can be dismounted and the trail, disconnected from the wheels, can be used as a tripod-stand on which to mount the gun, which can be carried on poles by three men, the trail by two men. Rapidity of fire similar to that shown in action with the Central London Rifle Rangers.



Nordenfeldt Four-Barrel 1-inch Anti-Torpedo Boat Machine Gun, as Mounted on Ship's Deck.

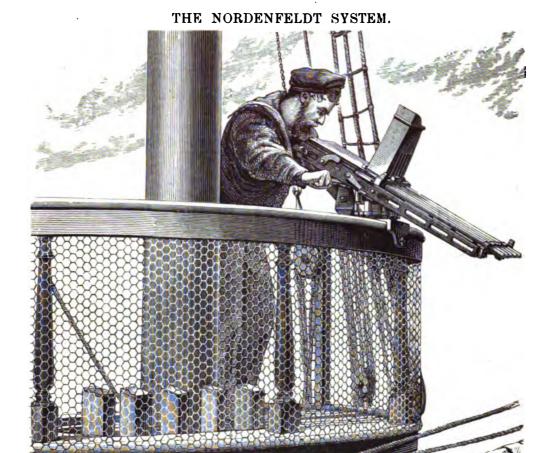
Calibre 1-inch; weight of gun 3.8 cwt.; of naval carriage 3.1 cwt.; of powder charge 1.54 oz.; of solid steel bullet 0.45 lb.; rapidity of fire, maximum in one minute, 200 shots; with deliberate aiming, 80 to 120 per minute; initial velocity, feet per second 1475; penetrates 1 inch of iron at 300 yards; fires either volleys or single shots; hopper contains 40 rounds of ammunition.

diminution in the proportions between men and material has reached an astounding position in navies; and, however slight that progress may yet have been in armies, the spade and the shelter trench are fair indications of the appreciation of the man in value.

The machine gun specially poses as a labour-saving instrument of destruction. It has been said that a couple of men with a ten-barrel Nordenfeldt might stop a regiment of cava'ry, and any one who has personally manipulated this tremendous engine would take his post in a defile, almost against an army, with much of the confidence

a street, or crossing a bridge, this extension cannot be had; here is the machine gun, with ten barrels only an inch apart, to take the place of ten rifles occupying some feet of front. The converging fire of rifles may not have its admitted superiority, if met by a diverging fire of machine guns; for each sector may at centre, and at circumference, discharge an equal share of fire.

Afloat, quite apart from the value of the man, his number is limited by lack of accommodation, and again the machine gun steps in and represents a heavy small-arm fire from a very attenuated "small-arm party." But



NORDENFELDT FIVE-BARREL, RIFLE CALIBRE MACHINE GUN, MOUNTED ON SHIP'S TOP, AND FITTED WITH SHOULDER AIMING PIECE.

of Sir Walter Scott's hero. When even a single-barrel machine gun may be said to represent eight riflemen, a ten-barrel may safely represent a company, with the advantage that the machine, with a sufficient supply of ammunition, will tire out half a dozen companies, and be as sure in its shooting at the end as it was at the beginning. But the saving in manual labour which the machine gun shows, must not be looked at merely as a saving. The employment of men requires space in proportion to the number. With rifle fire, an extension of front is an absolute necessity for its increase. Now, if, as in a defile, Vol. II.

FINEAU T

not only so. Space for men to use their rifles effectively, is always difficult to obtain on board ship; the machine gun offers generally the solution of the difficulty, and delivers a heavy and rapid fire from a very confined space.

The questions of weight and transport, of transcendent importance in armies, are only of minor value in navies, as regards machine guns. If the machine gun becomes ultimately an established military weapon for use in the field, its weight, mounting, and transport will long engage the closest attention of the soldier. The artilleryman tells

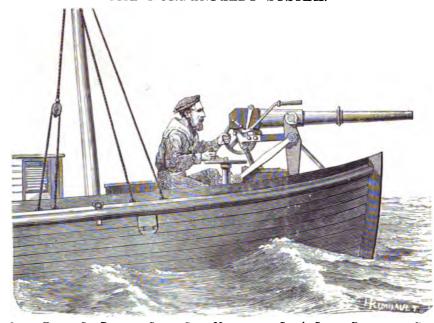
us that if the machine gun is to require a carriage as heavy as a field gun, and to take as many horses in its transport, then it has not sufficient advantages over the field gun proper, to justify any substitution. If there is to be no substitution, the weapon is not one which should be classed with artillery at all. The infantry soldier, again, is not ready to abandon his handy rifle, and encumber his movements with limbers and waggons. It is not suggested that the machine gun should be a cavalry weapon; and hence the three arms will, for the present, have none of it.

The opinion I have ventured to form is, that the heavier classes of machine guns, such as would require ordinary gun mountings to take them into the field, are not so likely to become the ordinary adjunct of an army, as some lighter class, probably transported on mule or

which will meet on the one hand a demand for overwhelming fire, and on the other a capability of transport not yet attained. That the progress of the machine gun should be slow in the armies of Europe compared to that in its navies, is not to be wondered at. In its navies the weapon fills a gap and supplies a want. In its armies the machine gun must fight for place, possibly with the field gun, probably with the rifle; and if it wins against the latter, it means nearly as great a military revolution as steam made a naval one.

It was apparent, as soon as the idea of hoisting out torpedo boats to take part in a general action became established, that there would be—in idea at any rate—a new field for the machine gun at sea. When each combatant prepared to attack the other, not directly, but

### THE NORDENFELDT SYSTEM.



Nordenfeldt Quick Firing Six-Pounder Shell Gun, Mounted in Ship's Steam Pinnace on Recoil Carriage.

Calibre 2.2 inches; weight of gun 53 cwt.; of recoil ship or boat carriage 43 cwt.; of powder charge 1.9 lbs.; of projectile 6 lbs.; of bursting charge of common shell 3.8 oz.; initial velocity in feet per second 1830; rapidity of fire, maximum per minute 18 shots; with deliberate aiming 12 shots; has ten pieces of mechanism only; total energy at muzzle 138 6 foot-tons.

horseback, and worked in action, on the ground. No one personally unacquainted with the conditions of a campaign and of a general action, is perhaps really competent to form an opinion; and the closest reflection of the mere student, must in this case teach him diffidence. I find myself, however, in general agreement with most of those who have had practical experience of the matter, and I conceive—with them—that an era of the machine gun may be close at hand for the English army—if for no other. It is not to be supposed that invention is to stop where it is, with a new and comparatively untried weapon in its hands. Development in many directions is sure to follow, and even the Gatling has appeared to be revolutionised by the new system of feed. Some means will be discovered

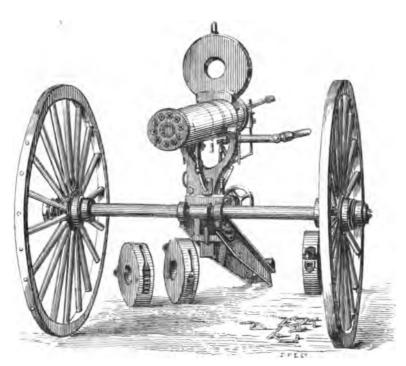
by means of a detachment, it followed for certain that one detachment would attack the other. If two ships met one another, hoisted out each her torpedo boat, and sent her against the ship her enemy, the condition of the pair of torpedo boats left alone on the ocean after they had succeeded in each of their enterprises, is not cheerful to contemplate. Better that the detached boats should settle which was master, before their parent ships went to the bottom, than after. But a torpedo boat, armed with a torpedo and nothing else, is hardly equipped to fight another torpedo boat without a torpedo, but with one or more machine guns. Preparations, therefore, begin for converting a torpedo boat into an anti-torpedo boat, by the employment of the machine gun in her, and it is a question

### THE GATLING SYSTEM.



ELSWICK IMPROVED SIX-BARREL GATLING GUN, ON TRIPOD STAND, WITH THE ACCLES POSITIVE FEED.

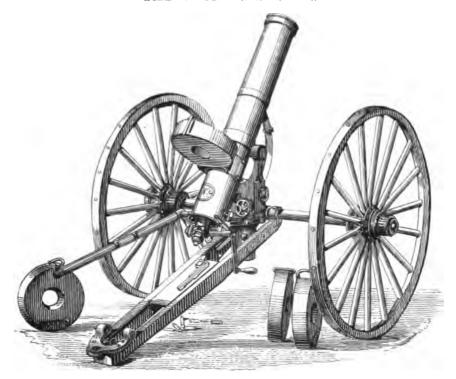
Weight of gun 101 lbs.; of mount 17 lbs.; of tripod 29 lbs.; rapidity of fire 730 shots per minute; elevation 80 degrees; depression 30 degrees; can be used with land carriage and limber containing 6000 cartridges and 12 feed.



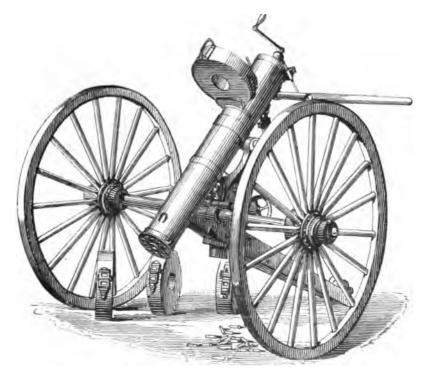
TEN-BARREL GATLING MACHINE GUN.

Calibre '045; weight of gun 226 lbs.; of carriage and mount 319 lbs.; of two steel boxes for feeders carrying each two feeders 59 lbs.; limber carriage and steel boxes for carrying 5000 rounds 398 lbs.; rapidity of fire 1000 rounds in 44 seconds; number of cartridges in each feed 104; number of feeders with each gun 10.

### THE GATLING SYSTEM.



TEN-BARREL GATLING GUN ON TRAIL AT HIGH ELEVATION FOR VERTICAL FIRE.



TEN-BARREL GATLING GUN ON TRAIL AT LOW ANGLE OF DEPRESSION FOR SEARCHING RAVINES, &c.

whether the latter idea does not kill altogether the former. For if two ships each propose to detach a champion as a preliminary, after the manner of the ancients, how shall they proceed? Shall A, knowing that B may launch an anti-torpedo boat, run the risk of losing her own torpedo boat to begin with? or shall she, knowing that B may possibly launch a torpedo boat, herself launch an anti-torpedo boat as a measure of security? Where the chances of an advantage are so extremely problematical, will either party reasonably attempt to gain one? It certainly does appear as though the era of the machine gun is to limit that of the torpedo boat.

between each single bullet's discharge, or must accept the chances of a waste of ammunition consequent on the gun being improperly laid after the first discharge. If the firing point is fixed and the object is fixed, this waste is no doubt reduced to a minimum, for only the vibration of the barrels will alter the conditions. But if either, or both, the target and firing point are moving, we get increased waste; and if both are moving, waste at a maximum. I remember finding that, with a moving firing point, such as a boat in smooth water, and a fixed target, seven rifles were equal to one Gatling of the old pattern, as far as hits per minute went, but that the waste of the Gatling

# THE HOTCHKISS SYSTEM.

HOTCHKISS REVOLVING CANNON FOR SHELL FIRE; AUTOMATIC FRED.

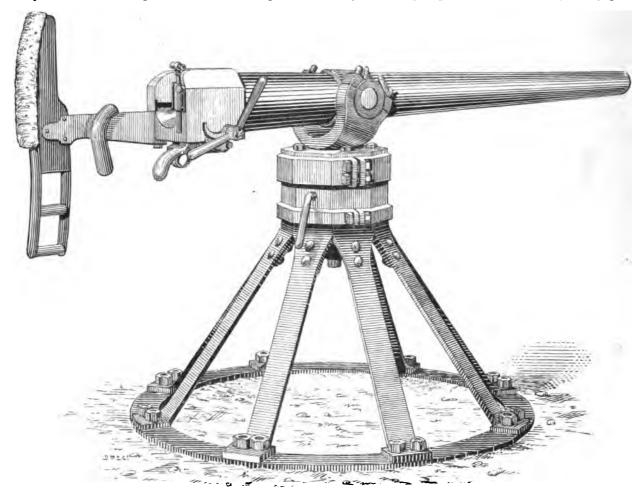
Calibre 1.45 in.; number of barrels 5; weight of gun 4 cwt.; of powder charge 2.8 lbs.; of projectile (shell) 1.12 lbs.; bursting charge of shell 52 oz. In use by the Governments of France, Germany, Russia, Austria, Italy, Greece, Denmark, Holland, United States, Brazil, Chili, China, and other States.

We may broadly divide the machine guns into two classes—the volley guns, and the stream guns—and if we take the Nordenfeldt system to represent the one class, and the Gatling to represent the other, we shall have matter for a few simple but important observations. In the volley gun we re-lay, or may be supposed to re-lay, between every discharge; so that the volley, of whatever number of bullets it consists, may be expected to go to its target with as great accuracy as a single bullet from an ordinary rifle or gun. As the stream gun fires a stream of single bullets in more or less rapid succession, it must either re-lay

was three or four times that of the rifles. The Gatling was designed in the first instance for land service, and under such conditions there would be always a fixed firing point, and very generally a fixed target. It was only when this stream gun came to be used from a moving firing point, like a ship or boat, that the deficiencies of the stream system became apparent. But it must be said on behalf of this system that, as the succession of bullets grows in rapidity, so the faults of a stream in wasting ammunition become minimised, just as a volley is but an infinitely rapid stream. The improvements in the Gatling

are all in this direction. The Gardner was originally a single or double barrel, and the double barrel was essentially a stream weapon. The system is, however, capable of being made a perfect volley system, which has, indeed, been practically accomplished in the 5-barrel Gardner. Mr. Gardner's aim has never been, however, to make a powerful gun. It has rather been to establish a minimum of weight and space in the first instance, and within that limit to achieve the greatest possible rapidity of fire. He did not apparently rival the other competitors for favour, but took up ground which they had left unoccupied. With the larger and

precisely the same services as those for which the English navy has adopted the Nordenfeldt, there is distinct rivalry between this purely volley gun and the other, which is certainly not a volley gun. The explanation is that the Hotchkiss is a shell gun, and its claim is, that the volley of splinters from its shell is on the whole more effective for the particular services in question than the four bolts which form the volley of the Nordenfeldt. The Nordenfeldt volley gun of one inch calibre claims that, as against a torpedo boat for instance, a single bolt is sufficient, if it strikes fairly in the right place, and that every volley gives four



HOTCHRISS SIX-POUNDER RAPID FIRING NON-RECOIL SHELL GUN, RECENTLY INTRODUCED INTO THE BRITISH NAVY AS AN AUXILIARY ARMAMENT. Calibre 2.24 in.; one barrel; weight of gun 7 cwt.; of powder charge 1.87 lbs.; of projectile (shell) 5.98 lbs.; bursting charge of shell 4.04 oz.

more powerful weapons there are difficulties of transport and difficulties of placing and training. Where such difficulties occur, Mr. Gardner appears to say, "Give up some of your power and accept a handier, lighter, and smaller weapon."

The Hotchkiss, though apparently belonging to the stream class, really takes up a place of its own, and may be said to offer, in a sense, a rivalry to the single-barrel quick-firing guns spoken of in the earlier part of this article, and now fast rising in favour. No doubt, also, that as the French navy has adopted the Hotchkiss for

chances of such a hit. An unburst shell from a Hotchkiss will be as effective as a single bolt from a Nordenfeldt, but not more effective; as, penetration being in either case secured, the difference in the size of the hole is not great enough to be material. But the chances of hitting are four to one in favour of the Nordenfeldt on every discharge.

Again, the argument brings in the single-barrel quickfiring shell gun. As the calibre of the Hotchkiss is larger than its rival Nordenfeldt, so is the calibre of the quickfiring shell gun larger than that of the Hotchkiss. Then the argument goes on to say that, granting that the fire of the Hotchkiss is, by reason of its revolving arrangement, more rapid than that of the single-barrel quickfiring gun, yet it is not sufficiently so to compensate for the greater penetration and more destructive effect of the quick-firing single-barrel's missiles. It is said not to be worth while to encumber yourself with multi-barrels when practically the gun must be re-laid every time, just as with a single barrel; that the calibre you can economically employ in a multi-barrel weapon is not great enough for the particular purposes in view; and that when you come to a shell gun, you had better have it of respectable size. As Hotchkiss and Nordenfeldt are both producing singlebarrel quick-firing guns, it would appear that the Hotchkiss, as a shell gun, is not sufficiently powerful, and that the rivalry between the Hotchkiss multi-barrel system and the Nordenfeldt multi-barrel system may be considered to rest in statu quo.

This brings us to a point which must probably long remain in a state of suspended decision. It is understood that the English navy is more solicitous in protecting its Nordenfeldts by shields than the French navy is in protecting its Hotchkisses. It can be plausibly argued that a penetrable shield is worse than no shield at all; but it cannot be forgotten that a rifle-proof shield will keep out rifle bullets, though it may be pervious to anything larger. A Hotchkiss shell, bursting on passing through a Nordenfeldt shield, may be terribly destructive-much more so than it could possibly be in taking the same path without passing through a shield. Yet, on the other hand, equal destruction might take place from rifle-calibre projectiles if there were no shield, which would be entirely prevented by a shield. The question at present seems to resolve itself very much into one of practical convenience, if not into one of preferential instinct. Numerous difficulties arise in the application of shields, such as limit to training or arc of fire, space requirements, and so on. But many

of these appear to be met, as they arise, by arrangements more or less ingenious, and it does not appear that the English will abandon the idea of some kind of shield. This question of shield may affect the progress of the weapon as a military arm; for while a company of riflemen will generally require the protection of a shelter-trench, which is not moveable if the men are to be preserved, a heavy machine gun, mounted as artillery, may carry with it very efficient protection against rifle fire, or even against shrapnel, in the form of a steel shield.

It is possibly a little remarkable that side by side with the advance of the machine gun into favour, we should in England find ourselves adopting a method of mounting heavy guns afloat, of which the machine gun is by far the greatest enemy. The turret system, or even the broadside system of mounting heavy guns in ships behind thick armour, practically laughs at the advent of the machine gun. All such bolts, even of the quick-firing single barrel, as do not enter the limited opening of the port, are absolutely harmless to the gun and crew, but an uncovered barbette, especially in a rolling ship, is terribly open to the rain of machine-gun bullets of the smallest size. Experts are fully alive to the danger, and designs for machinegun-proof shields, covering the barbettes, are in preparation, if not in being, and will, without question, be more or less adopted. But the establishment of the quickfiring gun, with a penetration of several inches of armour, throws an unpleasant doubt over the possibilities of efficient protection to the barbette-mounted gun.

On a review of the whole question, there remains a possibility that military science and tactics may receive sudden and remarkable developments from the establishment of the era of the machine gun; and that for the student of naval affairs, the matter deserves an attention second only to that demanded by the locomotive torpedo.

P. H. COLOMB.



### COLONEL FRED BURNABY.

Royal Horse Guards.

### A MEMOIR.



Y the death of Colonel Fred Burnaby in action with the British troops at Abu Klea on the 17th of January, England has lost one of the most popular men in her army. He possessed admirable qualities as an Englishman, and the truest characteristics

of a British officer. He had no fear of death in any shape, especially if this was to be met in the service of his country. He chivalrously gave his life while sharing in a gallant and arduous undertaking to rescue a brave and high-minded companion-in-arms from a perilous position in a fanatical land. This fact will, in some degree, assuage the sorrow of those who now mourn his untimely end. Colonel Fred Burnaby was a man whose spirit of resolution recognised no difficulties, whose physical strength overcame all obstacles in the stern path of duty. It was by the cruel decree of fate, that he was destined to die by the spear-stroke of a fanatical savage. He surrendered his existence gallantly fighting for his country's honour. He fell bravely, sword in hand, on the field of battle—a death such as every British officer prefers to have.

In personal appearance, he was over six feet two inches in height and developed in proportion. He was intensely fond of athletics, an excellent swordsman, a good shot with rifle, fowling-piece, and pistol, he was a powerful boxer, and an enduring horseman. His feats of strength have for years past been the theme on which the stalwart gallant soldiers, whom he commanded, have delighted to dwell.

In private life, the gallant Colonel was as much admired for his kindly, genial nature, as he was, in the army, for his undoubted courage and physical power. He had travelled much and adventurously. He wrote well concerning his numberless explorations in foreign and distant lands. His literary attainments were of a high order. His knowledge of men and manners, and of several languages, together with his possession of excellent social qualities, caused him to be regarded as a charming companion in every circle which had the pleasure of his acquaintance. Even Colonel Burnaby's political opponents, whom he attacked with all the strength of his vigorous character, admired him for his

manliness, and for his cordiality to them on all occasions when he met them off the political arena.

Colonel Burnaby was born at Bedford on March 3rd, He was the son of the Reverend G. Burnaby. His mother was a member of the county of Norfolk Villebois family. He received his commission in the Horse Guards on Royal September 30th, 1859, at the age of eighteen. He became Lieutenant on September 27th, 1861. Captain on July 27th, 1865. Brevet-Major on July 10th, 1879. Major and Lieutenant-Colonel on September 11th, 1880, and Regimental Lieutenant-Colonel on April 6th, 1881. Colonel's celebrated ride to Khiva in 1875, and the intense interest it created in British and foreign circles, afterwards caused him to be called "Khiva" Burnaby. The intrepidity of the enterprise, its dangers and vicissitudes. he related with a graphic pen. His adventures in Bulgaria during the Russo-Turkish war are well-known matters of journalistic relation. His perseverance in penetrating to almost unknown regions for particular purposes, and the truthful information he obtained and made known concerning those countries, often caused his visits to be regarded by them with feelings of apprehension.

The Colonel was a staunch Conservative, and aspired to serve his country as well in Parliament as he did in the Army. He contested Birmingham in the Conservative interest, but failed to obtain a seat in Parliament as a representative of that Radical stronghold.

He took great interest in the Egyptian question, and when the Soudan expedition from Suakim against the Mahdi's forces was undertaken last year, he served under General Graham, attached to the Intelligence Department, and was present at the Battle of El Teb, where he was severely wounded in the hand and arm. He had scarcely recovered from his injuries, when the Khartoum expedition was undertaken, and his arrival at the front was known in London on the 13th January last. In this expedition he was also attached to the Intelligence Department of General Sir Herbert Stewart's forces, and on the 17th was mortally wounded at the battle of Abu Klea.

### THE VOLUNTEER FORCE OF THE REIGN OF KING GEORGE THE THIRD.

BY MAJOR M. B. PEARSON, London Division, Royal Artillery. The 2nd Middlesex Volunteers.



HE remarkable progress made by the Volunteer Force during the last quarter of a century, has probably been greater than its most sanguine supporters could have anticipated, and it may now be regarded as a permanent

institution in the country.

In earlier times, threats of invasion from Spain and France have called similar forces into existence, with equal enthusiasm. It may be therefore interesting if we review the measures taken for the defence of the country during those times, and particularly during the reign of George the Third.

The oldest volunteer military body of which we have any record is undoubtedly the Honourable Artillery Company of London. It has been asserted that its origin dates back as far as the reign of William the Second, when it bore the title of the Company of St. George of London, and was composed of citizens who formed themselves into an armed association for the preservation of public order. Be this as it may, the Company has certainly a great antiquity, as a royal Patent of Incorporation was granted to it by Henry the Eighth, in 1537. At that period it was chiefly composed of archers, but we find, from the State Papers, that in 1582, in the reign of Queen Elizabeth, the Master Gunner of England submitted articles showing the necessity of a Corporation for the company of gunners, "for the increase and training of skilful gunners for the public service in the navy and fortified places, and the renewal and confirmation of the Charter of Henry the Eighth, of the Fraternity of Artillery." This seems to show that the Company was not, at that period, exclusively composed of Volunteers, that is to say, troops who, in time of peace, receive no pay.

In the year 1585, when great apprehension of a Spanish invasion existed, the citizens of London raised and maintained, at their own expense, a force of 5,000 men; again, in 1588, when the Spanish Armada made the actual attempt to invade the country, they raised a force of 10,000 men. This was probably the earliest date at which volunteers were raised. The State Papers of 1586 refer to the "voluntary men levied within the different counties."

Some authorities have ascribed the origin of the Honourable Artillery Company to this period, 1585, and it is probable that, as a purely volunteer corps, it took a new departure from that date, but towards the end of the sixteenth century it appears to have fallen off in the exercise of arms. In the year 1605, King James the First granted a new Patent to the Company, for the encouragement of archery, and in 1610, by the efforts of some of

its members, the Company was revived, and a new era in its existence was commenced. In 1633, King Charles the First granted another Patent to the Company, for the encouragement of archery, showing the importance attributed, even at that date, to this ancient exercise. This distinguished corps has maintained its efficiency, from the time of its revival to the present day, without interruption, and only recently, in consideration of its great antiquity, Her Majesty has granted the Company precedence next after the regular forces; a position of which it may well be proud.

In the time of King Charles the First, during the disputes between that monarch and the Parliament, we



LONDON AND WESTMINSTER LIGHT HORSE.

find that the London Trained Bands, as the militia was then called, had attached to them seven auxiliary regiments, numbering upwards of 5,000 men, and bearing the same designations as the other regiments of Trained Bands to which they were affiliated, namely:—the Green, the White (2), the Yellow, the Red, the Blue and the Orange regiments, so called from the colour of their flags. There is very little doubt that these auxiliary regiments were Volunteers, and from the State Papers of the period, it may be seen that the Council of State authorised the raising of Volunteers, who were "only to receive pay when in actual service."

The City of London having sided with the Parliament, these auxiliaries, together with the regiments of Trained Bands, fought against the Royalists during the Civil War, and Clarendon, in speaking of their conduct at the first



CASTLE BAYNARD. 150

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battle of Newbury, gives them the warmest praise for the manner in which they withstood the charges of Prince Rupert's cavalry. These regiments, together with the rest of the London Trained Bands paraded in Moorfields on their return from Newbury in September, 1643. Shortly after the Restoration, the auxiliary regiments were disbanded when the state of public affairs had become more settled.

The stirring times of George the Third afforded a wide field for the development of the principle of voluntary military service, both for active service abroad and defensive measures at home. The revolt of our American colonies, in 1775, caused a large increase to be made in the military forces; and various cities and towns raised regiments at their own expense, to reinforce the army in

America, and replace the losses which occurred during the protracted military operations on that continent. As the war progressed, France, and subsequently Spain and Holland, became opposed to England, and the feeling of insecurity caused by those combinations against us, led to extensive preparations for resisting the invasion with which this country was threatened. In the year 1778, the militia was called out, and Volunteer companies were formed of the citizens of the various towns. One of the first of these companies, the London Military Foot Association, was formed in July of that year, and exercised twice a week at the Artillery Ground, by permission of the Honourable Artillery Company. Their uniform, according to the Gentleman's Magazine, consisted of a white jacket, faced with blue, white waistcoat and breeches. This company first exercised in Fishmongers' Hall, until they received permission to drill at the Artillery Ground. It was commanded by Captain Sir Barnard Turner, and in March, 1781, the corps was absorbed in the Honourable Artillery Company; one of its members, Paul le Mesurier, eventually becoming Colonel of the Company.

In the month of October following, the Irish, becoming alarmed at the prospect of being invaded by France and

Spain—their country having been denuded of troops to augment the army in America-formed themselves into numerous Volunteer corps, which were furnished with arms by the British Government. The command of the first, or Dublin battalion, was offered to the Duke of Leinster, and, in 1779, 20,000 of these Volunteers mustered at Dublin, under the command of that nobleman, to support the Parliament in demanding free trade. Again, in 1783, the delegates of forty-five of these corps assembled at Lisburne, in the county of Antrim, to consider the measures to be adopted to effect a reform in Parliament.

One of the most distinguished corps raised in England at this period, was that of the London and Westminster Light Horse Volunteers, which is the subject of the first illustration. This regiment was formed in 1779, under the Act of the 3rd July of that year, and did duty in the metropolis during the Lord George Gordon riots in 1780. It was commanded by Colonel George Herries, who was the first member enrolled, and who retained the command for more than a quarter of a century. The uniform consisted of a black helmet, with large white plume at the left side; short scarlet tunic, worn open at the throat, with yellow braid across the front, like hussars; epaulettes, with

yellow fringe; blue collar and cuffs; white breeches; short boots; and black leggings, reaching nearly to the knee. Belts of buff leather, with black cartridge pouch. Arms, sabre and horse pistols. The dismounted portion of the regiment, wore the same uniform; but instead of a waistbelt they carried the bayonet in a belt slung over the right shoulder. The musket was the usual infantry smooth bore. with flint lock. We have here an illustration, not of mounted infantry, but of dismounted cavalry; and their mode of lucomotion was probably the same as that adopted by the Loyal London Volunteer Cavalry, a corps that came into existence at a later period. They pos-



CHEAP WARD.

sessed vehicles for the conveyance of their dismounted men, called "expedition carriages," which method has not been without its advocates in recent times.

The conditions of service of this regiment will serve as

an example of the obligations assumed by the rest of the Volunteers of the same period, and were as follow:—They might be called out into actual service, in case of invasion or insurrection, to do duty in the metropolis, or within the



distance of ten miles, and in that case they were to take rank in the army, and were to be under military discipline. The officers were elected by ballot at a general meeting of the corps, and on their names being sent up to the King, if His Majesty did not object to the nomination, they received commissions in the usual form, expressing the nature and extent of tbeir The services. standards, presented to the

regiment by order of the King and by the Lord Mayor of London, after the riots in 1780, were, after peace had been proclaimed, lodged in the Tower, and were resumed in 1794, when England was again at war with France. The regiment was disbanded in 1829. There is an interesting engraving at Lloyd's, representing this corps, together with the London Military Foot Association, firing on the Gordon rioters in June, 1780.

Among the other Volunteer Associations that were formed about this period, were those of the following wards in the city, namely:—Castle Baynard, Billingsgate, Tower, Cheap, Farringdon Within, Coleman Street, Cripplegate Within, Cordwainers, Bread Street, and St. Andrew's, Holborn. All of these associations, together with the Honourable Artillery Company, and those to whom reference has already been made, were on duty during the riots.

In the month of May, 1782, the home military force being dangerously weakened, in consequence of the large number of troops sent to America, the Earl of Shelburne, Secretary of State, proposed a more extensive plan for arming the people; and, in a circular addressed to the Lord Mayor of London, he sought to obtain an opinion of the feasibility of his proposal, which was as follows:— Each town was to furnish one or more battalions; officers

were to be appointed from among gentlemen in the neighbourhood, either by His Majesty's commission or that of the Lord-Lieutenant of the county, on the recommendation of the chief magistrate of the town in which the corps was raised. They were to be possessed of some certain estate in land, according to rank. An adjutant or town major, and army sergeants and corporals, all in Government pay, were to be appointed. The men were to exercise frequently in battalion, or by companies, on \ Sundays and on holidays, and also when their work was over in the evenings. Arms, accoutrements, and ammunition were to be provided by Government, if required, and were to be issued during exercise only. Proper magazines. or storehouses, in each town, were to be provided. The men were not to be obliged to move from their towns, except in times of actual invasion or rebellion, but then to any part of Great Britain. When called out they were to be subject to the same discipline, and have the same pay, as regular troops. Officers disabled in service were to be entitled to half-pay, and their widows to pensions for life. Non-commissioned officers and privates were to be entitled to the benefits of Chelsea Hospital.

The military operations in America had resulted in the surrender of Lord Cornwallis, and the whole of his force, at Yorktown, Virginia, in October, 1781; and ever since that event the feeling had been gradually gaining ground in Parliament, that it was hopeless to continue the endeavour to reduce the American colonies to obedience by force of arms. When Parliament met, in July, 1782, the King's Speech pointed to the expectation of a speedy peace; and negotiations having been opened with this object, provisional articles of peace between Great Britain America signed on the 30th of



COLEMAN STREET WARD.

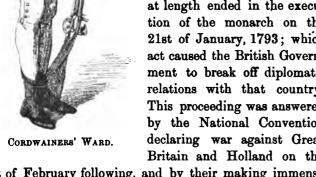
November, 1782. France, having succeeded in her object in securing the independence of America, had no longer any object in carrying on the war; and Spain, foiled in her efforts to recover Gibraltar and Jamaica, was not disposed

to prolong the contest. Negotiations ensued, which resulted in provisional articles of peace being signed between those powers and Great Britain on the 22nd of December, 1782, and thus the necessity of putting Lord

> Shelburne's proposals into execution disappeared for the

The commencement of the French Revolution, in 1789, again led to precautions being taken by this country to place it in a proper state of defence. The spread of revolutionary ideas, which had extended to England, had also given rise to grave anxiety; and in December, 1792, it was found necessary to call out the militia to assist in preserving public order.

The disputes between King Louis the Sixteenth and the revolutionary party in France, at length ended in the execution of the monarch on the 21st of January, 1793; which act caused the British Government to break off diplomatic relations with that country. This proceeding was answered by the National Convention declaring war against Great Britain and Holland on the



1st of February following, and by their making immense military preparations.

We need not do more than briefly allude to the operations of the English forces, under the Duke of York, and of our allies, in the Low Countries, which thereupon ensued, but pass to the beginning of the year 1794, when serious apprehensions of an invasion by the French began to be felt by the English people. On the 22nd of February the King, in a message to Parliament, declared an immediate increase of the land forces to be necessary; and in the month of March following the Treasury issued a circular letter to the lords-lieutenant of counties, recommending the formation of Volunteer corps, both of infantry and cavalry, to assist in repelling invasion, suppressing riot, &c., and suggesting that voluntary subscriptions should be commenced in aid of the national defence. In the debates in Parliament which ensued, considerable opposition was manifested to the proposal, particularly with reference to the raising of money by public subscriptions, which was held to be illegal, and frequent reference was made to Lord Shelburne's proposals of 1782; but eventually Mr. Pitt, who was at this time Prime Minister, carried the measure,

and on the 17th of April, 1794, an Act was passed for encouraging and disciplining such corps as should offer their services.

The Armed Associations and Fencibles, as they were then termed, formed during the last war, served as a nucleus for the new force about to be raised; and during the next three years large numbers, both of horse and foot, joined the movement. The yeomen and gentlemen cavalry, as they were then styled, became particularly numerous at this time; and later on the special Acts of Parliament which were passed with reference to the cavalry, caused the yeomanry to become somewhat different in its conditions of service to the rest of the Volunteers.

In the early part of 1798, renewed preparations by France to invade this country, led to further measures being taken for the defence of the kingdom. A fresh circular was addressed by Mr. Dundas, the Secretary of State for War, to the lords-lieutenants of counties, setting forth the conditions on which the services of the future Volunteers would be accepted. Briefly described they

were as follow:—No Volunteer was to be admitted into the Armed Associations whose habitual occupation and place of residence were not within the division of the county to which the Association might extend. The officers were to be recommended by the lord-lieutenant. The cavalry was to be formed in troops of from 40 to 80 men, and the infantry in companies of from 60 to 120 men, armed as the Volunteer corps of towns, or a certain proportion with pikes. They were to receive uniform clothing, and be trained for six hours, once a week, and in case of invasion to serve within the military district to which they belonged. Every! man who thought proper to claim it, was entitled to one shilling per week, paid by Government.

On a considerable force of the English militia volunteering for service in Ireland, the voluntary Associations received large accessions of strength. The public subscriptions in aid of the national defence began to pour into the Exchequer, and before the end



BREAD STREET : WARD.

of the year 1798, the amount reached upwards of two and a half millions, besides 139,332l. 15s. 2d. remitted from Bengal.

Meanwhile the efforts of the French had not been con-

fined to mere preparations. During 1797 and 1798 they made several attempts to invade South Wales, and Ireland, but without much success. The force under General Humbert, which had achieved a partial success against

St. Andrew, Holborn, and St. George THE MARTYR ASSOCIATION.

General Lake at Castlebar, was subsequently defeated by Lord Cornwallis, and surrendered themselves prisoners on the 7th of September, 1798.

At this period, 1798, the organization of the Armed Associations in the metropolis was chiefly by each ward or parish having its own Association, which led to a want of uniformity in the clothing, the style of the uniform being left to the discretion of each Association. The illustrations which accompany this article were published by Ackermann in 1798 and are taken as examples from amongst a large number. The uniform of the Castle Baynard Ward Association consisted of a helmet, covered

with black bearskin, red band and red plume; blue coat with facings of the same colour, and red shoulder straps; white waistcoat; white knee breeches and stockings, short black gaiters, and buff cross belts. Cheap Ward Association had a helmet covered with black bearskin, dark blue band and red and white plume; scarlet coat with blue facings; blue epaulettes with yellow fringe; white waistcoat; white knee breeches; long white gaiters reaching above the knee, with black garters, and buff cross belts. Farringdon Ward Within had a similar helmet, with black band and green plume; blue coat with red facings and red epaulettes; white waistcoat, white pantaloons, buttoned at the ankle, and buff cross belts. Coleman Street Ward had a black bearskin cap with yellow plume; scarlet coat, turned up with white, yellow facings and yellow epaulettes; white breeches, long black gaiters, and buff cross belts. Cordwainers' Ward wore a helmet covered with bearskin, with red and white plume; scarlet coat, with green facings, white waistcoat, white knee breeches, white stockings, and buff cross belts. The uniform of Bread Street Ward consisted of a similar helmet, with red band and white plume; blue coat, turned up with red. blue collar, and red cuffs and epaulettes; white waistcoat and knee breeches; white stockings, short black gaiters, and buff cross belts. St. Andrew, Holborn, and St. George the Martyr Association, wore a black helmet covered with bearskin, with a red plume; scarlet coat with blue facings and epaulettes; white waistcoat, white knee breeches and stockings, short black gaiters, and buff cross belts. The Hans Town Association wore a black hat covered with bearskin, with a red and a white plume; blue coat with red facings, white waistcoat, blue pantaloons, short black gaiters and buff cross belts. The Westminster Grenadier had the Grenadier bearskin hat, of French pattern, with brass plate in front, and white plume; blue coat with red facings, yellow epaulette on the right shoulder, and red shoulder strap on the left, edged with yellow; white waistcoat and breeches, long black gaiters reaching to the knee, and buff cross belts. The one epaulette only was probably to show that the Grenadier company took the right of the Another illustration represents an officer of the Highland Association, the prototype of the present London Scottish regiment. The Highland bonnet had

a red and white diced band, black ostrich feathers, and a green plume. The coat, scarlet, with yellow facings and silver epaulette; waistcoat red. slashed across the front with silver braid, kilt, dark green and black; sporran brown with white tufts; stockings, of red and white check. A gilt gorget was worn round the neck when on duty, and a crimson sash worn over the left shoulder. A sword belt, of white leather, worn over the right shoulder, and a Scottish claymore with basket hilt, lined with scarlet, completed this picturesque uniform.

Considerable progress was made by the Armed Associations towards military efficiency, and towards the middle of the year 1799, the King intimated his intention of holding a Review of the Volunteers in Hyde Park. On the 4th of June, His Majesty's birthday, a force of 8,989 men, belonging to London and the vicinity, paraded for



HANS TOWN ASSOCIATION.

the Royal inspection. The spectacle is thus described by Grose, in his *Military Antiquities*:—" At this memorable Review, the right wing, under the command of Lord Heathfield, consisted of twelve squadrons of cavalry,

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extending from the east end of the river to Hyde Park Corner. The centre, commanded by Major-General Ludlow, formed a body of twenty-nine corps of infantry, occupying the ground between Hyde Park Corner and Cumberland



WESTMINSTER GRENADIER.

Gate. In the left wing, under Major-General D'Oyley, were twenty-five corps of infantry, extending along the north side of the park to the west, as far as the Serpentine river: the whole line commanded by the Earl of Harrington, the General-in-Chief of the district."

As it was found impossible to assemble the whole of the Volunteers of the metropolis in Hyde Park on this occasion, another Review was held by the King on the 21st of June, when a force of 12,203 men paraded at different stations near their accustomed places of exercise. His Majesty made the inspection of each corps at its rendezvous, and at its conclusion expressed himself greatly pleased with the appearance and conduct of the troops.

On the 4th of June, 1800, the King again reviewed the Volunteers of the metropolis, the number assembled on this occasion amounting to 11,209.

In July, 1800, a riot occurred in Coldbath Fields prison, and a mob assembled outside the building. During the following day and night the Clerkenwell, St. Sepulchre's, St. Clement's, and the Bloomsbury Volunteers, attended by turns to guard the prison and keep off the mob. In September of the same year, during a bread riot, the mob was driven off by the Volunteers.

The French, who had been at war with Holland since February 1793, had concluded a treaty of alliance with that country on the 18th of May, 1795. Shortly afterwards the expedition sent by England against the Cape of Good Hope, attacked the Dutch settlement there and drove them from their camp. This was followed by Great Britain declaring war against Holland, on the 15th of September, 1795. On the 18th of October, in the following year, Spain declared war against this country, and thus we were opposed by a powerful combination which it required all our energies to meet. We need not dwell on the operations, by sea and land, in which this

country was engaged until the year 1800, further than to allude to the surrender of the island of Malta to our arms on the 5th of September of that year, which event played an important part in future political affairs.

Our operations against the French in Egypt, in the year 1801, had resulted in their evacuating that country on the 30th of August and a cessation of hostilities; and, on the 27th of March, 1802, a treaty of peace was signed at Amiens between Great Britain on the one part, and France, Spain, and Holland on the other part, and thus a war, which had lasted for nine years, at length came to a termination.

But peace was not destined to be of long duration; for Napoleon Buonaparte, who had been elected First Consul of France for life, becoming incensed at the delay in our surrendering the island of Malta to the Order of St. John, took every opportunity of expressing his resentment against this country, and, in an interview with Lord Whitworth, the British Ambassador at Paris, on the 13th

of March, 1803, the First Consul publicly insulted him in presence of other diplomatists, and threatened his Government.

Under the treaty of Amiens, Malta was to have been restored to the Order of St, John and placed under a guarantee of neutrality of the principal European powers; but since the ratification of the treaty, events had occurred which materially altered the previous conditions. In October, 1802, the King of Spain had confiscated all the property of the Knights of Malta in his dominions, and declared himself Grand Master of the Order in Spain, a step supposed to have been instigated by the French Government, and thus three langues of the Order, those of Arragon, Castile, and Navarre, were suppressed. The situation had been further changed by the fresh



OFFICER OF THE HIGHLAND ASSOCIATION.

acquisitions of territory which the French had obtained subsequently to the treaty being signed, and the additional power which they had thereby secured.

The British Cabinet did not immediately recall their

ambassador, but continued diplomatic relations with the French Government, until it became apparent that the negotiations which had been proceeding could have no peaceful termination; they then directed Lord Whitworth

> to return to England, and he accordingly quitted Paris on the 12th of May, 1803. On the 16th of May the

On the 16th of May the King issued his proclamation, which was laid before Parliament on the 18th. and war with France was declared. The commencement of war with Great Britain was notified by Buonaparte to the French nation on the 7th of June. became immediately necessary that a large additional force should be added to the army, and on the 18th of June the King issued a message to Parliament for arming the country.

A bill was immediately brought into Parliament for embodying a new species of militia under the denomination of the army of reserve, to consist of 50,000 men for England, and 10,000 for Ireland, to be raised by ballot, and confined to the defence of the United Kingdom. The officers were to be appointed from the regular army and the half-



St. George Hanover Square Association.

pay list. All persons from the age of eighteen to forty-five were to be liable to serve, with the exception of those who were exempt from the militia ballot, and such Volunteers as were enrolled previously to the date of the last message of the King. All poor persons having more than one child under ten years of age were also exempt. This bill became law on the 6th of July, but was only the precursor of a measure of the most gigantic magnitude, being no less than the arming and training of the whole effective male population of Great Britain. This project was presented to the consideration of Parliament on the 18th of July, and became law on the 27th of the same month. This general enrolment, denominated the levy en masse, was divided into four different classes: the first comprehending all unmarried men between the ages of seventeen and thirty; the second, unmarried men between thirty and fifty; the third, all married men between seventeen and thirty, not having more than two children under ten years of age; and the fourth, all under

the age of fifty-five not comprised in the other categories. The different classes were to be trained and taught the use of arms in their respective parishes, and were, in case of actual invasion, liable to be called out by the King, in the orders specified, to co-operate with the regular army in any part of the kingdom.

Enormous preparations were now being made by France for the invasion of England. They had collected at Boulogne, Brest, and other ports, an immense flotilla of transports and gunboats, and had assembled a great army ready to be embarked at the first favourable opportunity. The imminence of the danger was met by the people of these islands with the greatest alacrity, and, in a few months after the declaration of war, a force of Volunteers, numbering nearly 400,000 men, was enrolled and equipped for the defence of the United Kingdom, thus rendering the Act for the levy en masse completely superfluous, and throwing all previous exertions into the shade. The House of Commons voted 300,000l. for defraying the further charges of the Volunteer corps, in addition to the

sum of 99,169*l.* 4s. 8d., which had been previously voted for the service of the year.

The magnitude which the force was now assuming rendered it necessary that fresh regulations for its guidance should be made. Accordingly, on the 3rd of August, a circular letter was addressed by Lord Hobart, the Secretary of State for War, to the lords-lieutenant of counties, defining the conditions on which the services of Volunteer corps were in future to be accepted. Fresh regulations were immediately promulgated by the Secretary of State for the guidance of corps concerned, of which the following were some of the principal provisions:-

The various companies raised during former wars were to be grouped into regiments, battalions, and corps. From eight to twelve companies were to constitute a regiment, four to seven companies a battalion, and not less than three companies a corps. Each company was to be composed of from 60 to 120 privates. Every regiment of eight or more com-



St. Margaret and St. John, Westminster.

panies was to have one company of grenadiers, and one of light infantry; and battalions of seven companies and not less than four, were to have one company of grenadiers or one of light infantry. The whole of the infantry were to

be dressed in red, except the rifles, which might wear green with black belts; and the artillery, which might wear blue. The arms furnished by the Board of Ordnance to corps of Volunteer infantry were as follow:—"Musquets" complete, with accoutrements; drummers' swords, drums with sticks; and spears for sergeants. The articles furnished to the Volunteer artillery were pikes; drummers'



ST. GEORGE'S, HANOVER SQUARE.

swords, and drums with sticks. Spears were allowed for sergeants, and pikes to any extent for accepmen ted  $\mathbf{not}$ otherwise armed.

On the 10th of August, 1803, Mr. Sheridan moved that the thanks of the House of Commons be voted to Volunteer 9 the and veomanry corps of Great Britain, for the zeal and promptitude with which they had associated for the defence of the country. He also moved that the

returns of the different Volunteer corps be laid before the House, in order that they might be handed down to posterity by being entered on the journals. Both these motions were agreed to unanimously.

The returns rendered to the House of Commons, in pursuance of the foregoing resolutions, on the 9th of December for Great Britain, and on the 13th of December, 1803, for Ireland, showed the total effective strength to be—for Great Britain, 380,193, and for Ireland, 82,941; or a grand total of 463,134. When it is remembered that the population of the United Kingdom, in 1803, was only 15,000,000, it will be seen that the quota of Volunteers furnished by Great Britain was about four times greater than at the present day.

The various armed associations in and about the metropolis had, under the new regulations, been formed into regiments; and the foregoing returns embraced the following corps, which were under the jurisdiction of the Lord Mayor of London at that time:—

The Honourable Artillery Company, The Loyal London Cavalry, The three regiments of East India Volunteer Infantry,
The eleven regiments of Loyal London Volunteer
Infantry,

The Bank Volunteer Infantry,

The Excise Volunteer Infantry,

The Customs Volunteer Infantry,

The River Fencibles, and

The Harbour Volunteer Marine.

The total of these amounted to 14,053 men.

In addition to the above, the Corporation of the Trinity House had raised a corps of Volunteers, called the "Trinity House Royal Artillery Corps," which consisted of 1,086 men formed in ten divisions, and commanded by the Brethren of the Corporation. The Government granted the corps ten ships, for the protection of the Thames, which were stationed at Gravesend, and manned by the corps, for the defence of the port. The following are the names of the vessels employed:—

Heroine, Solebay, Modeste, Quebec, Resource, Dædalus, Iris, Vestal, Retribution, and Impérieuse.

The Loyal London Volunteer Cavalry had attached to them a troop of "Flying Artillery," the gunners of which were carried in "expedition carriages." These carriages, as well as their field guns, were presented by the Corporation of London.

On the 19th of October, 1803, the day ordered by the King for a general fast in England, the various Volunregiments attended divine service at their parish churches; and on the 26th and 28th of the same month, His Majesty reviewed the Volunteers of the metropolis in Hyde Park. On the first occasion, 12,401 London Volunteers paraded for inspection, and on second, 14,676 Westminster, Lambeth, and Southwark Volunteers assembled. The whole force was com-



RICHMOND VOLUNTEER.

plimented by the King in a royal order issued on the 29th of October.

The Corporation of London had, towards the end of 1803 resolved to present each of the Volunteer regiments in the City with a set of colours, and the ceremony of presentation took place at Blackheath on the 18th of May, 1804. The Duke of York, attended by the Lord Mayor and other

notabilities, made the presentation, which was attended by a large concourse of spectators.

While the French were making their preparations for invasion, this country had not been idle at sea; in September, 1803, Sir James Saumarez had attacked the port and town of Granville, and destroyed a number of vessels intended for the invasion of England; and Captain Owen, with the *Immortalité* frigate, had bombarded the town and fort of Dieppe. The Dutch ports were also bombarded and many vessels destroyed. The French, whose preparations were by this time completed, only waited the opportunity of obtaining command of the Channel for twenty-four hours, but we had hitherto been able, by blockading the enemy's ports, in preventing him from putting to sea. In this position we remained till towards the end of 1805.

Napoleon had been crowned Emperor on the 2nd of December, 1804, and on the 14th of the same month Spain had joined the French against us. Their combined fleets, under Admiral Villeneuve, at length encountered the English, under Lord Nelson, off Cape Trafalgar, on the 21st of October, 1805, and the victory obtained by the English on that occasion led Napoleon to abandon his enterprise of the invasion of England. He broke up his flotilla, and marched his immense army against the Austrians and Russians, whom he defeated on the field of Austerlitz.

The Volunteer force continued for some years to keep up its efficiency. All the various Acts of Parliament by which it had been governed had been amended and consolidated by the Act of 44 George III. c. 54, passed on the 5th of June, 1804, and under this Act it continued to serve during the continuance of the war, but as the danger of invasion began to disappear, owing to the successes of the English forces in the Peninsula, so the force gradually declined. In 1809, the state of the force in Great Britain was comprised in 366 corps, numbering 93,340 men. In 1811, when the Prince Regent wished to hold a review of the Metropolitan Volunteers at Wimbledon, the replies received from the various corps stated that the musters had of late been so inconsiderable that it was not desirable to attend the proposed inspection. On the 20th of June, 1814, a grand final review was held in London, at which the Prince Regent, the Emperor of Russia, and the King of Prussia were present, and on the same day an order was issued for the whole of the Volunteers in the kingdom, raised under the Act of 1803, to send in their arms. The greater part of the force was then disbanded, as peace with France had been proclaimed; and after the temporary outbreak of war, which ended with the overthrow of Napoleon at Waterloo in 1815, the country entered upon a long period of

M. B. PEARSON.

# ANNIVERSARIES OF BRITISH VICTORIES.

### THE CAPTURE OF MORTELLA TOWER, CORSICA, IN 1794.

At the commencement of the operations that resulted in the capture of the island of Corsica, it was found that a small round tower at Mortella Point commanded the bay in which the town of St. Fiorenzo is situated so effectively that the fleet could not enter the bay, nor the siege of the town be carried on, till this tower was captured or demolished.

On the 8th of February, the Fortitude, seventy-four guns, and the Juno, frigate, anchored at a convenient distance from the tower, and blazed away at it for two hours and a half. Many of the shot must have glanced from the rounded outlines, and many more, doubtless, missed it altogether; for, at the end of the time named, the tower appeared to be quite uninjured, but the ships were obliged to haul off. The Fortitude had six killed and fifty-six wounded, eight of them "very dangerously," and was seriously damaged in hull and rigging. The 2nd battalion of the 1st Royals, 11th, 25th, 30th, 50th, 51st and 69th

Regiments, had, in the meantime, been landed; and a battery for four guns was constructed within 150 yards of the tower, and opened fire. On the 10th, when this stout little tower was so much injured as to be no longer tenable, its garrison of a midshipman and thirty two men, of whom two were mortally wounded, at last surrendered.

The impression made in England by the unexpected resistance offered by this insignificant little work was so great, that similar towers were considered the best kind of coast defences. Mortella got altered somehow into Martello, and, designated by the latter name, many of these towers may still be seen along the south coast of England.

Ships of war now carry armour impervious to any shot, which could be fired from these little castles, and immense rifled guns which could demolish one of them by a few shot and shell. The Martello towers, though no longer affording much protection to our coasts, form convenient quarters for coast-guardsmen and others.

E. O'CALLAGHAN.

#### SHOT AND SHELL.

### BY MRS. POWER O'DONOGHUE.

Authoress of "Ladies on Horseback," "Unfairly Won," "A Beggar on Horseback," etc. etc.



THE GALLANT COLONEL'S FATAL ACCIDENT.

#### CHAPTER I.



L news travels quickly, and shocks the hearers; it therefore happened that when Colonel Netherby, alias Pekin Paul, broke his leg hunting with the Galway "Blazers," and died from the effects of it at his residence, Yale, on

the borders of Clare, the intelligence of his decease fell like a thunderbolt upon his only son, young Shot Netherby, who was at the time on leave from head-quarters at Knightsbridge, and was "starring" it, in private theatricals and other festive amusements, at the Southsea autumn residence of his friend, Sir Milyan Eyre, whose son (a still greater friend) was a Major in the crack regiment of Hussars, of which young Netherby had, only a few days previously, seen himself with much pride and glory, gazetted a full-blown captain.

Shot was a wild, good-looking, hot-headed, generousnatured young fellow, who had received his baptism of fire in Zululand, had pluck enough in him to front an enemy

single-handed, and had won ample honours at polo. cricket, and in the hunting-field. He was always in love and perpetually in debt-and was famous for getting into every imaginable scrape to which human flesh is subject. His name, deprived of two letters by his sire's whim, had been registered at his baptism as "Schott," a family cognomen, familiar on his mother's side; but the elder Netherby, addicted to all things savouring of warfare, had refused to see virtue in the second and concluding letters of the title, and had purposely cut them off to satisfy his own ends and whimsicalities. "Round Shot," the boy had been called, when too much corn-flour, and pap, and surfeit of farinaceous food in general, had produced an infantile rotundity of appearance; "Small Shot," to distinguish him from an uncle who occasionally visited Yale; "Grape Shot," when the youngster as a two-year old displayed a predilection in favour of the fruit of the vine; and "Knowing Shot," when boys of his own age, or older, were shrewdly done out of marbles, bats, and balls. All that the young chap wanted, his father thought, was a companion of his own flesh and blood to play with, and when Mrs. Netherby blushingly informed him that such was likely to arrive, the good man at once set himself to discover an appropriate title for the expected stranger. "If it's a boy," he kept perpetually saying, "we'll call him -what shall we call him, my dear? We've got a Shot already, a prime one: suppose we call him Shell! There couldn't be a nicer name than that I'm sure; short and smart and soldier-like, and all the rest of it. Eh, my dear?" And poor Mrs. Netherby, who was in delicate health, had only energy enough to say, "Yes, dear, but suppose it should happen to be a girl?" when she sank down upon a bed of sickness, which she never quitted until the cause of their speculation had come into the world; nor even then, till the undertaker and his followers came to carry her out.

The new babe was a girl—fair, fresh, pure, and pink as any sea-shell that ever lay beneath the waters of the great deep—and the bereaved widower, sitting all day and every day in his quiet study, with hands clasping his face, raised his dulled eyes for a moment when they came to question him, and said, "Let her be called 'Shell.'"

This, however, is a retrospect, and happened eighteen years previous to the date at which the news of his own untimely decease came crushingly upon his son in the midst of a season of unusual fun, frolic, and excitement of every sort.

"Good God!" the youth exclaimed, as his sister's black-bordered letter—following close upon a preparatory telegram—was put into his hands; "Can it be possible? The poor governor, and poor, poor, little Shell!"

Then he got behind his oak, metaphorically speaking, and sat down sadly, almost sullenly, to think.

Rather a dark picture uprose before him. In the fore-ground himself figured, a heap of credit accounts, duns and debts around him, and a positive promise given under his hand to pay his uniform bills (one hundred pounds or upwards) before the close of the current week—an amount, by the way, which the governor—had circumstances been happier—would have been asked to "stump out." His promise was passed, too, to ride *Highfyer* on the sly in a handicap at Shrewsbury, and he had been counting on his acknowledged skill in the pigskin, and the known excellence of his anticipated mount, to pull him through a labyrinth of difficulties—brought about by plunging over recent racing events, and by almost every other, description of reckless and ill-advised folly.

In the background of the picture he saw the dead face of an ever kind and indulgent father, the tearful one of an afflicted sister, and the discontented looks of a host of disaffected servants, of whose behaviour he had of late heard many grievous complaints.

And to what, after all, was he heir?—he, the only son of a proud and aristocratic house. A patrimony worth, if rents were paid, some eight hundred or a thousand a-year, but scarcely more than half that under existing circumstances, and mortgaged besides to pay expenses consequent upon his own martial career; an old-fashioned dwelling-house, a good deal out of repair; a few head of cattle; three goodish hunters; a dog-cart or two; a jauntingcar; a wall-eyed cob; an old grey, past his work; some fairly good farm horses; a Shetland pony and carriage; two sheep-dogs, a fox-terrier, and a Manx cat. These, together with the charge, sole and altogether, of an extremely pretty sister, five years younger than himself, and about as much ready money as would decently defray the funeral expenses, were about all to which the heir of Yale found himself entitled.

During most of his father's lifetime they had contrived to keep their heads pretty well above water, for old Paul was a careful man and discreet, and had a tolerably happy knack of making almost everything that he touched prosper, but latterly there had been difficulties of which Shot knew nothing, or next to it; and now, added to these, was the knowledge he possessed that the deceased man's pension had ungenerously departed with him, and that there was very little indeed coming in from the estate.

It was altogether rather a blank lookout for young Netherby, who could remember (or thought he could) when they were quite rich and prosperous, before *The Cardinal* had got beaten at Chester, or the eight thousand sovereigns—together with gold-nuggets, and jewels of

fabulous value—been abducted from his father's escritoire, and no clue obtained that could lead to the detection of the robbers.

A very curious circumstance altogether that had been. To go back a little.—Colonel Netherby, formerly a captain in one of the Indian native regiments, had been among the foremost of the British force when Pekin was sacked, and despite the fact that the French had been a day in advance, had managed to get possession of a goodly share of the palace valuables. A detachment of his swarthy followers had managed to penetrate into some of the palace apartments not discovered by the French, and, following the example of the Gallic soldiers, had completely looted Their gallant commanding officer happened to have at the time some ready cash by him. His men, partly through not being able to carry their spoils about with them, offered to their Captain in return for a trifle in money, a large number of costly articles. Well knowing that if he did not purchase the valuables, they would surely fall into the possession of others who would have no scruples whatever about their acquirement, he bought, for nominal amounts, many articles which did not seem at the time to be of a high intrinsic value. These he shipped off and consigned to a merchant friend in London, with particular instructions as to their safe custody until his return to England.

Arriving later on in his own country, upon the death of his father, who had left Yale at his disposal, he found that the increasing delicacy of his foreign wife rendered necessary his retirement from service.

An inspection of his consignment from China by a trade expert, revealed the fact that the gallant officer was the fortunate possessor of some thousands of pounds' worth of realisable property, but with increasing years had come likewise increased peculiarities, and tormented by a needless fear of bank failures and danger to stock, which some events at the time seemed to justify, Netherby—then retired with the rank of Colonel—one day lodged the whole of his possessions in his own house, intending to invest them the next in some recommended securities, and neglecting to do so was, two nights later, mysteriously robbed of the bulk of his accumulated treasure.

This was the story—a very shadowy one—of "The great Yale mystery," "The daring burglary in the County Clare," and many other announcements of a like startling nature which, at the time of the occurrence, had inundated the public press and shaken Irish society to its centre—but, despite the seeming vigilance of the authorities, and the endless presence of police, nothing had ever come to light concerning the affair, and gradually, with the lapse of years, the circumstance of the robbery dropt out of public remembrance, and what was once a thing perpetually spoken about, became as though it had never been.

Even young Shot Netherby, as he sat, so many years later, brooding heavily over the greatness of his parental

loss, thought but dimly of that other and more sordid deprivation, ghostly tales of which had from time to time been told him—and wondered in his own mind, seeing it as he did "in a glass darkly," whether he had indeed any personal though childish recollection of it; or was it but a brain-fable—the fancy of a disordered mind?

manner in which he stretched out his hand whilst keeping his face averted, all served to tell the tale.

"I am very sorry, Shot, upon my soul I am," said Reginald, kindly. "Is there anything in the world I can do for you, dear old chap?"

"Nothing, except talk to me a little," was Netherby's reply.



LOOTING THE PALACE AT PEKIN.

A knock sounded upon the door-panel, and Reginald Eyre came in. He had guessed the catastrophe of the death from the nature of the telegram that had arrived the previous day, and not wishing to intrude too soon had delayed doing so until now. His friend's dejected attitude, the black-bordered letter lying open upon his knee, the

"I believe that will do me more good than anything else. I've been melancholy mad this last hour I verily think, striving to fit things together, and seeing no way of making them come right. It seems so awfully sudden; and there's such a lot to get done!"

Reginald drew his chair closer, as he said, "There must

be, of course. Let us think it out together, and see what ought to be first."

"Oh, the very first thing of all is for me to start for home. I can get there to-morrow; leave London by the 8.25 to-night, be in Dublin at seven, and catch the morning train down. You'll send a wire to my sister, in my name, like a good fellow, telling her that I'm coming, and that I'm all right, and so forth—because she evidently didn't want to shock me; he must have been actually dead when she sent that telegram by way of preparing me for this account to-day. Will you send it at once, Reggie—please."

"I believe I have done so already," Eyre answered looking down. "I knew she would be anxious, and I knew also precisely what you would wish to say. I shall come up to town with you myself, and see you safely off. Don't mind thanking me, please, but just say what else I can do,—or if there's anything you'd like to open your mind to me about; I don't think we have very many secrets from one another."

"Oh, I've got plenty to say, of course, and any number of things to talk over," Shot answered, with a nervous fingering of the letter that lay on his knee; "I must throw up the service, and go and live at home."

Eyre looked greatly surprised, but he paused for a moment before saying, "Is that a matter of necessity? It's rather an important step, you know."

"Of course I know it; no one better: but it must be done. Who's to look after the old place, and to manage all that the governor used to keep going? And above all, who's to mind Shell?"

Reginald leaned his right elbow upon his knee, and bent his head while he thoughtfully stroked his long moustaches. "Ay, who, indeed?" he murmured in a low tone

"There it is, you see," said Shot, almost petulantly. "There never was such a hard case as mine. A fellow can't allow everything that he has just come in for, to go to the mischief for want of a manager, nor can he leave his sister alone in the very heart of a disaffected country. You were there last winter, and know what kind of place it is; you know Shell, too, and can judge whether she's the sort of girl to be left without a protector."

"I trust she will never be that," exclaimed Reginald, getting hastily up, and beginning to pace the room, with folded arms and head bent low on his breast. "Have you not somebody who could—some female relative to whom—I mean who might——"

"I have none, thank goodness!" burst in Shot, before he could finish the sentence; "I detest female relatives elderly ones I mean—and a man can't give his sister in charge of a set of sparkling girls! No, I shall give up soldiering, and settle down into a country squire, with the pigs and ducks and jackasses for company, and a newspaper once a week or so, I suppose, to tell how the world is going." And with a wretched attempt at a laugh, which ended rather hysterically, the young man jumped up from the couch on which he had thrown himself, and joined his friend in his somewhat limited walk

"So now, Reggie," he went on, "when next you come to visit us at Yale, it won't be like last time at all; there'll be only one fine fellow—yourself—to keep up the credit of the army in the eyes of those benighted country folks. The poor governor's gone, grand old soldier that he was, and as for me, I'll meet you in the porch (where you and Shell used to spoon) with knee-breeches and worsted stockings, and a clay pipe stuck in my caubeen!"

The poor boy strove to speak lightly, but Eyre could see that his mouth was quivering, and that the eyes that had looked unflinchingly on danger and death, were moist and heavy with unshed tears. If ever a soldier loved his calling, Shot Netherby was the one; if ever the Queen's uniform had been proudly donned and bravely carried, it was by the bold honest heart that now, for another's sake, was about to lay it aside for ever.

"How will you manage? Who will succeed you?" Reginald presently inquired; "I don't believe we have at this moment a single supernumerary officer in the regiment."

"I suppose not, but I'll arrange it, somehow. There's Val Gordon! He'd be very glad, I fancy."

"I shall see him while you're away, and talk it over. I have no doubt we shall be able to make it all right for him. Now, I don't 'ask it out of impertinence, you know me better than that, but I should really like you to tell me, have you—can I—you know what I would say; if you want a friend in any way you have one here, in this room."

"I know it, indeed," Netherby answered heartily, "but I shan't have to beg nor go to the workhouse, for a while at least! There's a trifle coming in from the estate—enough for Shell and me to get along quietly with—and there'll be a horse for you to ride, and a knife and fork at table (with something, I hope, to use them on) whenever you come to Yale."

"Yes, but Shot, that is not all quite satisfactory, so far as you are concerned. I can see very plainly, I know you'll excuse me for saying it, that there will be need for some ready money. Will it be forthcoming? Have you any capital to fall back upon?"

Young Netherby strove to force a smile as he answered, "I've a capital lot of bills, and a capital appetite, but nothing beyond them, that I know of. Never mind, however, Reggie; I'll manage to pull through, as I said before, without troubling anybody, and if Shell only keeps cheery I shan't mind very much about anything else. Now we'll go outside and smoke a pipe together, and then you shall help me to pack my kit for Yale."

It was with a very heavy heart that the youth bade fare-

well to his particular chum and comforter, and laying his hopes of future distinction in the dust, journeyed to the land of the "Blazers," to arrange for his father's interment and take charge of the bereaved sister, to whom he had determined henceforth to devote himself. "Oh, Shot, my darling!" she cried, as she clung weeping to his broad breast an hour after his arrival, "how I wish I had died too, then you need not have had to hurry back all this way to take care of me. It is very, very hard on you, dear!" and she cried bitterly. "If we only had an old maiden aunt," she presently went on, "or an old bachelor uncle, who could come and live here and keep me company. I need not be a burden upon you. Other girls have such luck! There's Clara Holt has such a delicious old aunt, with a front, and goggles, and a reticule on her arm, and a poodle that bites everybody's heels,—just the very exact thing that would have suited me!" And Shell again shed tears.

"Never mind, dear," her brother answered, cheerily; "we shall do quite well without the old maid or the poodle, and of course I should have had to come home in any case, to take up and manage the place. So you are not one bit in my way, nor in my light, and we shall contrive to be quite jolly after a while, and see a few people down here—Reggie Eyre, when he can get over, and some others—and we'll run up to town, too, occasionally—you and I—and buy new frocks and frills and things; so don't fret, my pretty, or you'll worry me awfully."

But even speaking thus hopefully, the youth turned away his head that she might not look too closely into his betraying eyes; and four days later, sitting down in his father's study (now his own), he wrote to his friend Eyre, saying, "There never was a poor devil in such hard luck; I can't do much hedging, and *Highflyer* hasn't a ghost of a chance with *Kinglake* up !—but I'll pull through, somehow,—my favourite expression, you know."

And so old Paul Netherby—Colonel Paul—the kindly friend, the devoted father, the genial neighbour, and the boldest cross-country rider in the difficult stone-wall district in which he resided, was buried and almost forgotten, save by his two sorrowing children. And Highflyer, with Kinglake up, got beaten on the post by a rank outsider, and the heir of Yale, unable to raise a further mortgage on his heavily-encumbered estate, got into the hands of Jews and infidels, and, forgetful of the kneebreeches and the caubeen, ordered and wore the best, and drank Richebourg and smoked Cuban cigars—while his sister Shell, with a dim uncertainty of the fitness of things, fed the chickens in the poultry-yard with an apron guarding her crape, and carefully brushed her well-worn habit, that she might not look shabby when the hounds should once more meet at Yale.



OVER THE SECOND FLIGHT.

## CHAPTER II.

On a cold, murky, disagreeable day in early April, one which showed "winter still lingering in the lap of spring," some thousands of persons were assembled upon the race-course on the famous Curragh of Kildare. The stand was not unpleasantly crowded, although a goodly contingent of fashionable race-goers had assembled upon it, while lines of carriages, drags, and large numbers of pleasure-seeking pedestrians filled up the ample space below. Mounted horsemen (not, as at Fairyhouse and other Irish meetings, restrained) galloped merrily over the course, a small sprinkling of ladies showing pleasantly among them; and the usual array of thimble-riggers, three-card-trick men, Aunt Sallies, &c., was uncomfortably visible.

A hurdle-race, the only one on the card, had just been contested, evoking the accustomed amount of interest and enthusiasm—and the favourite had won, for a wonder—and there were a good many bright faces over the event, and some very dark ones also.

It had been a marvellously close pull between May Lass and Pioneer, the former piloted by Ranson, the latter by George Grey. Over the second flight of hurdles the mare had got on level terms with the favourite, and passing him a few strides further on, had held the lead until headed by Nightshade, who had a magnificent pilot in

James Law. The three had then raced in pretty close order until nearing the turn for home, when Nightshade hung out signals of distress, and her rider (who never rode for a fall) eased off at once, the running being then taken up by Vivandière, who had at one time been named for a good thing. But the daughter of Wanderer lacked stamina for the distance, and giving way at the Chains, Privateer and Mr. Corcoran's mare ran a magnificent race home. When Ranson sat down for his rush, Grey also set to, and neck-and-neck the two competitors flashed by, the wind cutting past their ears, and the heels of both riders steadily at work. The contest was a severe one; first one, then the other, a head in advance—and "May Lass!" The mare! the mare!" "The horse:" The favourite wins!" were shouts that deafened the ear upon every side.

It was doubtful which really had won, when the race was actually over. So close had been the struggle that "a dead heat" was the fiat of many, as apparently locked together they shot past the post. For a moment uncertainty reigned; then the judge's verdict went out—"Pioneer, by a short head," and the numbers were run up, while the jockeys came trotting back to weigh.

An anxious moment or two for backers, and the wishedfor "All right" was pronounced and passed rapidly from lip to lip, while the winner—with that "all-out-of-him" appearance which racing folk so well know—was walked about the enclosure, and inspected by the crowd, interested and otherwise, as heroes of the hour invariably are.

Among those evidently best pleased over the event was a tall, broad-shouldered young man, wearing a light overcoat, with a race-glass slung over his shoulder, whose gay, pleasant eyes seemed made for fun and laughter. It was Shot Netherby. He had won a goodish thing by *Pioneer's* victory, and was rejoicing over it with a friend, who, without having had anything on himself, seemed yet as pleased, or very nearly so, as his more fortunate companion.

"By Jove, I'm in luck to-day—a rare thing for me!" said Shot, buoyantly. "If I hadn't pulled off this time, I'd have gone a queer cropper. Well, I sha'n't bet any more till next June, Reggie, for fear of provoking fortune. How pleased Shell will be! The little monkey has deserted me."

"Where on earth can she have gone?" asked the other, looking about him and lighting a fresh cigar; "you surely must know?"

"Of course I know," said Shot, laughing. "You never supposed that I had allowed her to get lost in the crowd! We shall pick her up by and by. She got nervous over this race, and wouldn't wait for it, so went off yonder to visit some old granny who nursed her. I believe it was really for that purpose she came down here to-day, for she's fond of Dublin and hates Kildare—bad taste, I think, but girls always like shopping, and promenading, and

visiting about: things that you and I detest. We cross to England to-morrow night, by the way. I've made up my mind; so you may just as well come along with us as stop behind a while longer by yourself."

"I don't mind," said Reginald, puffing contentedly, and gazing idly at the saddling for the next event on the card. "Better all go together, I should say; 'twill be pleasanter for me, at any rate, than following in your wake."

"You see," said Shot, looking splendidly important over the announcement, "I mean to do some business in town: to get a tip or two that will help to put me on my legs, and perhaps pick up a good hunter to keep up the credit of Yale. Besides, it will be a change for Shell, after a whole winter's ruralising; and she wants it."

"True, it will," said Eyre, with something that might almost have been taken for a flush. "Where have you arranged to meet her? Which way has she gone?"

"To be candid, I don't know this place very well," confessed Netherby; "but she went in that direction"—pointing a little to the left—"with a small gamin for a pilot. He said he knew the house she wanted, and that it was close to Donnelly's Hollow—wherever that is," laughing a little, "I'm blest if I know! but I promised to meet her on Mr. Donnelly's preserves."

"It is almost time for you to think about it, then," said Reginald; "you are a good way from that side, and there's a storm coming on, or I'm much mistaken."

"Not a bit of it! I know the Irish skies better than you," said Netherby carelessly. "Besides, she's not half done gossiping yet. I sha'n't neglect her, never fear." And glancing at his card, as the jockeys' varied colours flashed before them in the fitful sunshine, the master of Yale linked his arm in that of his friend, and drew him forward to watch the preliminary canter.

Meanwhile, a girl, dressed in a well-cut Newmarket and a becoming round hat, was chattering gaily in the neat kitchen of a cottage situated about a mile from the course. Her feet were on the fender, a cup of fragrant tea was in her hand, her coat was unbuttoned, and her crape veil laid across her knee. The light from a small lamp, for it was dusk indoors, fell upon her chestnut hair and bright ingenuous face. Her only companion was an old woman, who wore silver spectacles, a mob cap, and a red woollen shawl crossed demurely upon her bosom. She looked quite a marvel of respectability and tidiness, and kept knitting industriously while she talked.

"Ah, my dear young lady," were the words she was saying, "I saw the day when the Curragh was a gayer place than it is now—when the hounds were over it three or four times a week, with all the gentlemen in red coats, and beautiful ladies too, galloping about, and tumbling off their horses, so sweet and pretty it'd do your heart good to look at them! And Mr. Moore, away up there at Jockey Hall, with Miss May and Mr. Garrett and a whole heap o' sportin' gentry stopping at the house; and Mr. Allen

McDonagh at Athgarvan Lodge, giving work to half the country, and taking his fine string o' race-horses out every blessed morning, cantering away there over the brow o' that hill beyond, and lepping them over the furze bushes on the way home again. They're gone now!—and dear Mr. Ritchie, God rest him! and we go near forgetting the

aside. "No, no! Shot wants to get some horses, and is taking me with him for a change."

"Glory be to goodness!" exclaimed the dame, throwing up her hands and suffering her knitting to fall in her lap—"more horses! Well I never! As if there isn't lots. There's Rufus, and Goggles, and Muncher, and King John.



SHELL IN NANCY'S COTTAGE.

old times and old customs altogether, we do indeed. And so you're off over the water to-morrow night, dearie? and mebbe you'll never come back again to your old nurse. Its meeting some handsome young sprig you'll be, over there, and forgetting Yale."

"Not very likely, in a ten or twelve days' visit," smiled the girl. blushing a little, and jumping up to lay her cup and Blind Polly, and a lot more in the paddock, as I always said ought to be shot, or have their heels sewed up in sacks or something, when you young ones was about!"

"Why, Nancy," said Miss Netherby, in a fit of amused laughter, "you forget the lapse of time. All the animals of your day have gone to the happy hunting-grounds long ago, except poor old Rufus, who is alive still and made

much of, because he was papa's favourite hunter before Shot went to college."

"Ah me! yes, dearie," said the old woman, nodding over her knitting. "I forget the years—I do indeed; twenty o' them is like yesterday, only shorter! And how are things at Yale, my sweetheart, now that the dear good master ain't there to manage?"

"Oh, I don't know," answered the girl, a little impatiently. "Not very good, I think. I do all I can to save, but Shot can't, of course; men never can—it looks mean. And then he is always buying things for me that I don't want at all, nor even know what to do with, just out of fondness, but I wish he wouldn't, all the same. He bought me a monkey the other day, and I'm afraid of my life of it. It has pulled half my clothes to pieces, and nearly cut its own throat with one of Shot's razors, and it uses my hair-brushes on its horrid body, and I'm not at all certain either," added poor Shell, half crying, "that it has not used my tooth-brush!"

The dame drew in her lips while her young charge thus lamented.

"If Master Shot goes on like that," she presently said, "there'll soon be very little left at Yale."

"Oh, pray don't say such a cruel thing!" cried the girl self-reproachfully, "he only did it because he loves me; and, indeed, he is not too extravagant generally; and yet—and yet—I fear at times that he is dreadfully hard up."

"Then he shouldn't be seeing company at Yale," said the dame decisively; "it runs away with a heap o' money. I seen the time when the master wouldn't do it, 'cos he had to be paying heavy for Master Shot's soldiering; and if——"

"But really, Nancy," interrupted Shell, with her face

in a flame of blushes, "the only visitor we have lately had is one whose home was open to Shot from the time he first entered the army; they were brother officers. Besides, Shot loves hunting, and likes to have mounts for his friends. He is not a bit different to other men; they are all alike. What on earth would they do with themselves all through a long, snowy winter if they had not hunting, and shooting, and skating, and other outdoor sports to fall back upon? I am glad they have, Heaven knows, for they would be awfully in the way in the house! Just fancy a man loitering about all day long and idling-bringing your boots, and folding your shawl, and fetching and carrying for you like a big spaniel, and then, when you sat down to sew, snipping your threads, and trying your scissors on his finger-nails! Ugh! I should box his ears, or go crazy, one or other. But gracious!" she added, jumping up, "it is almost dark. I did not notice how fast the daylight was fading. Good-bye, gran, for a while. I'll run down to see you again the very next time we are in Dublin; and pray don't get fancying that we are going straight to the workhouse, or that Yale and its belongings will have to be auctioned off to pay Shot's debts. Oh, no, he intends to win a lot of money some day on a big race, pay off everything, and settle down into a steady-going country gentleman, riding a wheezy old cob from one farm to another, and having the gout in both feet. Won't that be nice and respectable? Good-bye again, gran. find my way all right. Keep straight along-must I not ?until I come to Field's; then take the right-hand turning, right away from Athgarvan, and I'll find the Hollow on my left? Good! I shall not go astray."

And laughing cheerily, Miss Netherby kissed her nurse and stepped out into the chill evening air.

(To be continued.)



### NEW RUSSIAN UNIFORM AND FIELD EQUIPMENT.

(Beiträge zur Kenntniss der Russischen Armee.)



HE uniform of the Russian soldier had, till very recently, many points of resemblance with that of his German congener. If in anything, it surpassed in richness and costliness the splendid uniforms of the Prussian

service. But within the last few years the Russian military authorities have introduced a startling change. The plumes worn on parade, and lately common to all branches of the service, were abolished by a warrant of 11th June, 1881; while the epaulettes of the Dragoons and Hussars, and the sabretasches of the latter, were also sacrificed to the craze of innovation. Field caps, and short breeches to be worn inside the boot, were introduced at the same time.

A warrant of 14th November of the same year tended still further to simplify the costumes of the Russian service. It provided for the introduction of a national uniform common to the whole army, with the exception of the Guards, Hussars, Uhlans, and Cossacks.

The figures herein represent an officer of the Guards and a private of Russian infantry. The head-gear for parade consists of a sheep-skin cap, the brim of which is trimmed with black cloth. It is ornamented in front with a cocade and the two-headed eagle of Russia. The Artillery wear two crossed guns, the Engineers two crossed axes. Instead of the national arms, the Guards have a star surmounted by a distinguishing badge.

On service and in the field, the Russian, like the Austrian soldier, carries only one head-covering. It is a field cap of black cloth, whose dulness is relieved in the Guards by a cocade; in the Grenadiers by a cocade and the letter "G," and in the Line by a cocade and the number of the wearer's regiment. The caps of officers, sergeants, and non-combatants have an oilskin covering. The tunic is of dark green cloth, and is fastened by hooks and eyes. The latter arrangement enables the wearer to doff his tunic without difficulty, and materially lightens his labour in preparing his uniform in the case of mobilization. The blouse, like the tunic, is so fashioned that it can be tightened at the waist; while its fulness will allow of its being worn over an under-jacket. The different coloured shoulder-straps are the only ornaments of a tunic whose very facings resemble it in colour. The Grenadiers, Dragoons, and Engineers, are supplied with a

strong linen pocket at each side, for the supply of cartridges in action—an innovation which cannot fail to be of the greatest practical service, as in future the soldier will need to carry a much greater number of cartridges than the usual service pouch will accommodate. The new cloak, which is only intended for the Guards, Uhlans, and Hussars, is also provided with hooks and eyes; and has



RUSSIAN INFANTRY SOLDIER IN NEW UNIFORM. FRONT VIEW

the same shoulder-straps as the tunic. The stock is made of black cloth.

The field equipment of the Russian infantry soldier has undergone as complete a revolution as that which has so much altered his uniform. The old knapsack was abolished by a warrant of 13th April, 1882, and superseded (see figures) by two large satchels. One of these—the real valise—is made of waterproof canvas. It is divided in the interior into five divisions or pockets. The suspensory strap, which is made of cloth, is carried over the left shoulder.



Russian Infantry Soldier in New Uniform. Back View.

1. Valise; 2. Haversack; 3. Boot-covering; 4. Field Water-bottle; 5. Canteen; 6. Linnemann Spade; 7. Cloak; 8. Strap for Boot-covering; 9. Field Tent.

The valise should contain the following articles of field equipment: two shirts, one pair of linen underclothes, one towel, one pair of woollen gloves, a baschlik, the necessaries for the rifle, sewing and polishing materials, &c. In one of the inside pockets there are four packets, each containing six cartridges.

The second satchel—the haversack—which is of like size and appearance, is carried over the left shoulder. Inside the haversack is a pocket, made of service linen, which is buttoned to its back. It should contain 6 lbs. or 2.455 kilos of biscuit. It receives in addition \( \frac{1}{2} \) lb. or .055 kilo. of salt in a special pouch, also a copper drinking vessel, which latter can be attached easily and expeditiously to the water-bottle. In order that both flasks should lie easy on the hip, they are joined by means of a buckle and strap.

The four-cornered boot-case is fastened on to the upper side of the cloak, which the soldier carries over the left shoulder rolled up en bandoulière. This boot-case, it may be remarked, is made of the same material as the two large satchels. It is designed to carry two pairs of jack boots. If the cloak be worn, the boot-case can be carried over that portion of the tent which every soldier has to carry with him. The wooden water-bottle is slung on a broad hemp rope over the right shoulder. The copper

cooking utensil is so fixed that its handle comes over the cloak strap.

As in the French and Austrian services, the small Linnemann spade is carried on the left side. The blade is inclosed in a covering of white Russian leather which is connected with the waistbelt by two buckles. The Russian infantry soldier carries his axe in a similar manner. Each of the cartridge pouches, which are carried in the front of the waistbelt, is divided into five different divisions all containing six apiece.

Every soldier has to carry with him, besides the abovementioned articles of field equipment, a half share of a tent or field-covering. This portion, which embraces one side of the tent, one-half the pole, and a rope, is rolled together and fastened to the cloak when the latter is not worn. The side of the tent is 1.955 metres in length and 0.888 metre broad. The tent pole is 1.422 metres high. In order to pitch the tent, the two parts must first be connected by the rope, which runs alternately through two buckles. Two tent poles are then erected at a regulated distance from each other, about the length of an average



RUSSIAN OFFICER OF THE GUARD IN NEW UNIFORM.

man. The rope, with the joined sides, is spread over them. The loose ends are fastened front and back to the ground. The tent, such as it is, is then complete; and will provide sleeping accommodation for two men.

The uniform and field equipment of the Russian infantry soldier weighs in all 28.592 kilos. which is distributed in the following proportions:—

Linen 0.716 kilos.
Uniform, cap and boots 6.953 "
Valise and contents 4.107 "
Haversack and contents 3.247 "
Boot-case 1.648 ,
Cooking utensil 0.755 "
Portion of tent 1.410 "
Water-bottle when filled 1.057
Small spade with covering 0.916 ,,
Cartridge pouches and contents 2.808 ,,
Waistbelt 0.213 ,,
Rifle, with bayonet 4.742 "
Total 98:509
10tal 20 002 ,,

That the new Russian uniform is an eminently useful and serviceable one, cannot denied. But it must at the same time strike the military critic that the imperial authorities, in seeking to simplify to the uttermost detail the costumes and equipment of the army, may have somewhat overshot the mark. The Russian soldier, in his

somewhat dowdy uniform of to-day, cannot feel the same personal and collective pride as in the rich and tasteful outfit of a few years back. This consideration may be of more practical moment than is at first sight apparent.

The regulation that only one head-covering should be taken into the field, whereby the soldier is spared a weight, however small, when every pound is of vast importance, is an exceedingly practical one. Especially remarkable, too, is the equipment of the soldier with two pairs of jack-boots. It seems, however, that comfortable as they may be in the long winter months, they are decidedly the reverse during the short but warm period of summer. So inconvenient were they, indeed, that each soldier was recently permitted to cut the uppers off one of his two pairs.

Whether the new method of carrying field necessaries be better than the old knapsack, it would be rash as yet to decide. Neither its defects nor its conveniences have as yet had time to excite widespread comment. The retention of the *tente-abri*, contrary as it is to general European precedent, is explained by the fact that the future campaigns of Russia are likely to be confined to cold and intemperate climates, where some protection, however meagre, is of the utmost importance.



# ANNIVERSARIES OF BRITISH VICTORIES.

#### THE ACTION AT ZOOR IN 1821.

THE piracies of some Arab tribes inhabiting the shores of the Persian Gulf had brought them into conflict with the forces of the East India Company on several occasions. In 1809 an expedition was sent against the Beni-boo-Ali, the most turbulent of these tribes. It was commanded by Lieut.-Colonel Lionel Smith, and comprised his own regiment, the 65th, and about an equal number of Bombay Sepoys. In November Ras-al-Khyma was stormed, with a loss to the Arabs of 400 killed. After this severe lesson they were tolerably quiet for several years.

In 1820 this bellicose tribe once more became obnoxious, and when the Sheikh of Ras-al-Hadan was sent to them with an important message, they literally cut him in pieces. Six companies of Bombay Sepoys, with eight guns, and some troops belonging to the Imaum of Muscat, were sent against them. Preparations were then made for storming their positions, but these wild sons of the desert did not await the attack. On the 9th of November, while the Sepoys and the Imaum's troops were being formed up for the intended advance, the Arabs, with the simple tactics of their race, tried against us with varying success on many fields, and last at the wells of Abu Klea, charged sword in hand, and utterly routed their opponents. The greater number of the Sepoys, and all their officers except two, were killed, and the panicstricken survivors, after taking shelter for a short time in the little town of Zoor, resumed their flight to Muscat.

In those days such a defeat, with the consequent loss of prestige, could not be accepted as the termination of hostilities, and so, in the beginning of 1821, another expedition—the last—was sent against these fearless Arabs. It was commanded by their former conqueror, now Major-General Lionel Smith, C.B., and was composed of the 65th Regiment, the Bombay European Regiment (afterwards the 103rd Royal Bombay Fusiliers), and several regiments of Bombay Sepoys, with details of artillery. General Smith's force landed at Zoor at the end of January, and encamped near that place.

On the night of February 10th, four or five hundred of these Arabs, after an undiscovered and unsuspected march of fifty miles from their stronghold, burst into the camp at Zoor. As soon as the inlying picquets had formed up and part of the troops had got under arms, the Arabs were driven off; but they had, in the few minutes of surprise, killed an officer, ten European soldiers, and six Sepoys, and wounded three officers, twenty soldiers, and three Sepoys. The total loss of the Arabs could not be ascertained, but they left eleven killed and twelve wounded on the ground.

The action at Zoor was followed three weeks later by a far more serious conflict, and one so decisive in its results that the Beni-boo-Ali Arabs disappeared thenceforth from the pages of history.

E. O'CALLAGHAN.





MISS FLORENCE NIGHTINGALE.

Machine & Macdonald Lab., to the One on

### THE DECORATION OF "THE ROYAL RED CROSS."

#### FLORENCE NIGHTINGALE.



HEN, towards the end of 1854, cholera, dysentery, and malignant fever had tracked our army from Bulgaria to the Crimea; when, without bedding or tents, officers and men had to lie out on the cold, wet ground; when ambulances had broken

down, and the sick at the front died for want of medicine and proper food; whilst ships in Balaclava harbour held abundance, and thousands of cattle were detained at Constantinople for want of transport; when double and treble duty, sometimes of forty-eight hours at a stretch, was breaking down the stronger men whom disease had as yet spared; when in the grimmest mockery green coffee was served out to the men by the commissariat, whilst the commissary-general was writing home appetising descriptions of the aroma of properly-prepared Turkish coffee; when doctors feared to indent for hospital supplies lest their masters, the clerks in Pall Mall, should cut their pay; when 1,500 wounded of the Alma had to suffer nearly a week with wounds undressed, whilst lint, medicines, and appliances lay rotting on the beach at Varna; when to be brief, our War Office had, by the grossest incompetence, mismanagement, neglect, and jealousy, brought the army and the nation to the verge of disaster and disgrace, then Mr. Sidney Herbert, the War Minister of a Liberal Government, broke away from precedent and red tape, took a new departure, and appealed to a woman to save our soldiers.

Florence Nightingale, the younger daughter of a Hampshire squire, a lady of remarkable natural and acquired endowments, and eminently fitted for the arduous task by experience and long training in the great hospital at Kaiserswerth and other continental establishments, undertook the charge of thirty-seven nurses, and arrived with them at Constantinople on November 5th, 1854, at the moment that up at the front the Guards were calling the muster-roll after Inkermann.

Under her management, the utter confusion reigning in the vast hospitals at Scutari were quietly and rapidly reduced to order, and at last the soldier, when he saw that ladies could leave home to come out there to him in his misery, began to believe that the people at home really cared for him. Of course, the officials prophesied all sorts of evils from the shocking innovation. But instead, there came more nurses. In December Mary Stanley (may she rest in peace!) arrived with fifty more nurses for Scutari and Kululi, where some 4,000 sick were in hospital; and the nurses were never in the way except to do good. The work of these noble women foreshadowed the Red Cross.

A British Order of the Royal Red Cross for women without Miss Nightingale as a member, would be like the setting without the jewel, and in spite of official tables of precedence, there is not an Englishman who does not in his heart place her name close to that of the Queen on the Roll of the Order.

It is not only here in England that she is justly held in reverence and honour. At the International Conference of the Red Cross, held at Berlin in 1869, the President in his opening address incidentally introduced the name of Florence Nightingale, and the cheers that again and again burst forth from the large assembly of representatives of every European nation, showed that throughout the civilised world she is recognised as the personification of the principle of humanity in war.

At the close of the Crimean War, the Earl of Ellesmere in the House of Lords eloquently expressed the feeling of the whole nation in these words: "Strong voices now answer to the roll call, and sturdy forms now cluster round the colours. The ranks are full, the hospitals are empty. The Angel of Mercy still lingers to the last on the scenes of her labours. Those long arcades at Scutari, in which dying men sat up to catch the sound of her footstep or the flutter of her dress, and fell back on the pillow, content to have seen her shadow as it passed, are now comparatively deserted. She may probably be thinking how to escape, as best she may, on her return, the demonstrations of a nation's appreciation of the deeds and motives of Florence Nightingale."

The last few years have been passed by her in an active retirement, her brain and pen incessantly at work to prevent and lessen suffering wherever it may be found.

When the history of the reign of Queen Victoria comes to be written, there will be no name more deservedly lasting in the popular memory for all time than that of Florence Nightingale, an ideal for future generations of English women to strive after. Charles J. Burgess.

#### MILITARY BIOGRAPHY.

COLONEL THE RIGHT HON. THE EARL OF WEMYSS, A.D.C., &c.





HO is the father of the volunteer movement? Many have laid claim to its paternity, and without discussing the question at length, so as to make an affiliation order on the subject, it may be said that the Earl of Wemyss was foremost in the revival of a force which in January

1804 was returned with a strength of 341,400.

On the publication of the famous Circular, 12th May 1859, the London Scottish sprang into existence under the command of Lieutenant-Colonel Lord Elcho-now the Earl of Wemyss-who spared no exertion either in or out of Parliament to make the volunteer movement a success. So devoted was he to the cause that, although just commencing a brilliant legislative career, he left Parliament for a year in order the better to assist in the establishment of the volunteer army. The success of the movement was mainly caused by the good fellowship displayed by all connected with the revival. Men flocked round such leaders as Elcho, Ranelagh, Grosvenor, Bury and Brown who devoted themselves disinterestedly to the defence of the country. There was an object in common between the nobility, gentry, and artisan, which broke down the barriers of caste. Men who, as Thackeray said, "dearly love a lord," became proud of "My Lord the Lieutenant-Colonel," not because he bore a coronet, but for being a crack shot with his rifle, or for having made his regiment singularly efficient on parade and at the butts.

In July 1861 Lord Elcho defended the grant of £133,275 for volunteers and yeomanry. At that time there were in all about 150,000 volunteers, made up of 592 cavalry, 20,360 artillery, 1482 engineers and 125,550 riflemen. It was estimated that each volunteer cost annually £10 for uniform, arms, &c., while the cost per man for drill sergeants, practice-ranges, and incidental expenses ran to twenty shillings. Strenuous efforts were made to obtain Government assistance towards meeting these necessary outlays, and Lord Elcho was invariably to the front in trying to open the purse-strings of a cheeseparing and parsimonious administration. Politics apart, it is but just to remark that the revival of the volunteers was due to the late Lord Derby's Administration in 1859. They had not been out of swaddling clothes, when they came under the tender mercies of a (so-called) Liberal Government, who recognised the value of their services by practically trying to make them perish through inanition.

During the lukewarmness of the then Government, displayed in respect of a grand national movement, is it too much to say that Lord Elcho's efforts practically saved the volunteers from sudden death? Let facts speak. The efficiency of the force was a good reason for Government assistance, which, however, was not promptly forthcoming. Not only were the volunteers efficient, compared with the boy soldiers of to-day, but in 1861 their numerical strength exceeded that of the regular army. In that year they numbered 150,000, while the army consisted of 146,000 men. Lord Elcho in his bold endeavours to compel an unwilling Government to find funds for the volunteers, was ably backed up by the people of Glasgow, while a conference of Metropolitan officers passed resolutions calling upon the authorities in the Sleepy Hollow of Pall Mall to provide drill sergeants, practice-ranges, and an allowance towards taking proper care of arms. Copies of these resolutions were sent to all officers commanding in the provinces by Lord Elcho, and the result of the agitation was that in 1862 a vote was carried in Committee of Supply for an increased amount of money for the volunteers; namely £122,880, or about 16s per head. Subsequently through Lord Elcho's exertions a Commission was issued to inquire into the subject of the volunteers generally. The result was that an unwilling Government granted drill instructors as well as adjutants for the

The Royal Commission moved for by Lord Elcho sat on the 27th May, 1862, and on twelve other days. Lord Elcho represented the Scottish volunteers. The report of the commission recommended a capitation grant of £1 with ten shillings extra for efficiency, which was adopted, while many concessions were made to the volunteers. Their store-houses were exempted from taxation, and their horses employed in their military duties were freed from duty. Permission was given them to shoot and drill in certain of the royal parks, subject to the pleasure of Her Majesty. The rank of volunteer officers was defined as junior with regard to the army and militia and equal to the yeomanry. Volunteers on duty, and conveyances used by them when on duty, and horses so employed, were declared free of toll, and any one insisting on payment in contravention of the Act was made liable to a penalty of £5.

The falling off in numbers which was feared by many of the witnesses examined by the Royal Commission, was happily averted by the measures adopted, and the numbers of efficients increased from 113,511 in 1863 to 123,707 in 1864, 133,848 in 1865, and so on in proportion. The grant, however, was not considered sufficiently large by a great number of volunteers, and after several deputations had waited upon the Government on the subject Colonel Bartelott, in 1868, in the House, attempted to obtain an increased allowance. Sir John Packington in reply stated that the cost of the volunteers amounted already to £385,000 a year, while the proposed increase would be an additional annual charge on the country of £155,000. The question was deferred for further discussion till the debate arose on a motion then impending by Lord Elcho.

On the 22nd June, 1868, Lord Elcho moved that an humble address be presented to the Crown, asking that a Royal Commission might be issued "to inquire into and report upon our military organisation with reference to the establishment of a sufficient and economical army of reserve, and a means of speedy and efficient expansion to meet the requirements of war, especially for home defence." The question was fully debated and various suggestions were made, but the motion was finally withdrawn and in autumn the Conservative Government went out of office.

In the same year that witnessed the revival of the volunteers the National Rifle Association was formed, with the object of insuring the permanence of and giving increased life and vigour to the volunteer service, by supplying those who composed it with some central object of interest and mutual ambition, the practice of rifle shooting. It was desired to make the rifle as popular with Englishmen as the bow had been in mediæval days. With these objects the Association proposed to establish in this country, meetings for rifle competitions similar to the Tir Fédéral and Tirs Cantoneaux of Switzerland. The National Rifle Association began its work under brilliant auspices. Lord Herbert of Lea (then Mr. Sidney Herbert) became President, while the Prince Consort was patron of the Society. The first Wimbledon meeting was opened by the Queen, when on July 2nd, 1860, Her Majesty attended by the Prince Consort, the Prince of Wales, and a

brilliant suite visited the common. Upon Her Majesty's arrival addresses were presented and graciously replied to. Then the Queen proceeded to a dais where a Whitworth rifle had been carefully adjusted to a target at 400 yards. The duty devolved upon Lord Elcho, as Chairman of the Council of the National Rifle Association, to explain what had to be done, when Her Majesty pulled the cord attached to the trigger and the flag at the mantlet announced that the Queen had fired the first shot at Wimbledon and scored a bull's eye. In 1862 Lord Elcho instituted the Elcho Challenge Shield for competitions between chosen teams of England and Scotland. In 1865 representatives of Ireland were for the first time allowed to enter for this prize, which never fails to provoke keen and healthy rivalry.

The life of the Earl of Wemyss is so inseparably connected with the existence of the volunteers, that a description of the one involves necessarily a history of the other. Space will only now permit to say that the Right Hon. Francis Wemyss Charteris is the ninth Earl of Wemyss and March in the peerage of Scotland (Baron Wemyss in that of the United Kingdom). Born 1818, he was educated at Eton and Christchurch, Oxford, where he graduated B.A. in 1841. In the same year he was returned to the House of Commons for the eastern division of Gloucestershire which he represented until 1846, when he resigned his seat, having abandoned the support of the protective corn laws and become a convert to the trade measures of Sir Robert Peel. In August, 1847, he was returned as a Liberal-Conservative for Haddingtonshire which he continued to represent until his succession to the House of Lords. The Earl of Wemyss was a Lord of the Treasury under the Aberdeen administration, 1852-55, retiring with the Peelite party in February of the last-named year from the administration of Lord Palmerston. He has been Deputy-Lieutenant for Haddingtonshire since 1846, and among his many honours he is LL.D. of the Edinburgh University, Commander of the Legion of Honour and A.D.C. to the Queen; the last distinction having been conferred upon him in recognition of the splendid services rendered by him to the volunteer movement. His lordship married in 1843, Lady Anne Frederica, second daughter of the first Earl of Lichfield, and his eldest son Lord Elcho now represents Haddingtonshire in the Conservative interest. The Earl of Wemyss by his accession to the Upper House has not taken a less lively interest in the volunteers, and the debate on the auxiliary forces last year, proves that he goes heart and soul in maintaining the efficiency of our national defences.

The accompanying portrait of his lordship is from a likeness executed by Mons. Albert E. Fradelle, 246 Regent Street, whose studio forms a well-stocked portrait gallery of naval and military celebrities, together with the most eminent men of the day in literature and art.

A. L'ESTRANGE.

#### NAPOLEON IN EGYPT.

BY CHARLES J. STONE, LATE 85TH ROYAL SUSSEX REGIMENT.



HERE has been no suggestion that Lord Wolseley's idea of forming a camel corps was original. But probably it will only be remembered by a few persons, that Napoleon ordered precisely the same formation some eighty-

six years ago in Egypt. The East India Company also possessed, at one time, a corps of camels, each animal mounted by two men armed with musketoons or swivelguns. The company of quiet-looking, broadcloth-coated merchants of Leadenhall Street, had this quaint armament amongst the brilliant levy of swarthy, flashing-eyed warriors, whom they arrayed and paid, in their glittering realm. Probably they rarely realised either the realm or the semi-barbaric transactions which were being carried on in it, for the sake of what are supposed to be the peaceful operations of commerce. But the Cobdenian conception, that commerce and peace are allied, seems by no means supported by actual facts. It was really in the interests of commerce, that our navies swept the seas in the first half of the last century, and won for us the empire of the ocean. Certainly it is commerce which has given us the rule of the sword in India. In fact, if a trader has a warehouse full of goods, he appears to be delighted to see armed operations anywhere which will open up to him a market. David, in The Rivals, complains to his master, Acres, that there has not been such a merciless beast in the world as a loaded pistol. It would certainly appear, that to the ledger of commerce may be also attributed a very striking degree of aggressiveness and mercilessness. Even young ladies at fancy fairs, in the desire of getting rid of their articles, abandon the reticence of their sex, and make the most unblushing assaults on all who come within their reach.

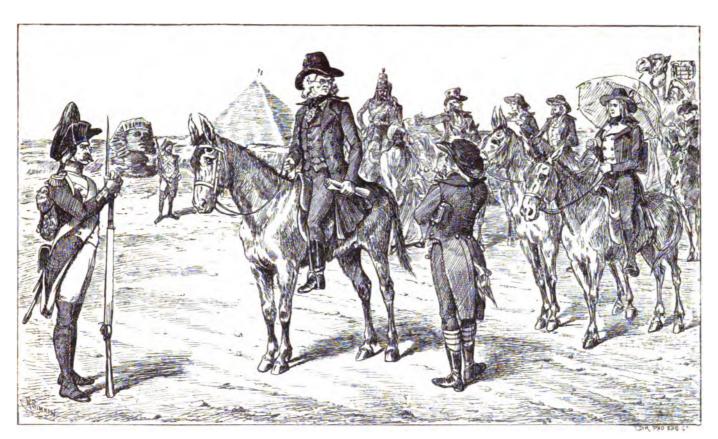
Napoleon's campaigns, however, were undoubtedly for power, not for commercial interests. It seems to have been a magnificent idea of conquest and glory in the East which induced him in 1798 to suggest to Talleyrand, then minister for foreign affairs under the Directory, the propriety of occupying Egypt. Ostensibly, however, the movement was directed against England. By seizing Malta and occupying Egypt, France would gain a territory which would compensate for her losses in the West Indian Islands, and obtain the means of annoying England in her Indian trade and empire. Meanwhile, Britain was still supposed to be threatened with invasion. The threat had called forth a burst of loyalty in every part of the country. Regular and volunteer forces had been rapidly raised with the most patriotic ardour. By 1799 our regiments of infantry, to the number of 100, had each received a second battalion. Although the volunteers had not responded in such numbers as in 1804, when they amounted to 400,000, they had displayed sufficient ardour to demonstrate to Buonaparte that the country would not fall an easy prey.

Extensive preparations, moreover, were requisite to get the French shipping in condition for any attempt upon the shores of England. It is evident that Buonaparte had recognised the fact that we were by no means ripe for conquest. While therefore he still affected to be preparing for the invasion on the coasts of Normandy and Picardy, it was on the borders of the Mediterranean, that the ships and troops were assembling which were really destined for action. Buonaparte, after his Italian triumphs, had made judicious exactions from the art galleries of Italy, by summoning to his aid a body of eminent artists and connoisseurs. He had enriched Paris with the loveliest spoils of art by their intelligence; and, in this expedition, he determined to open the antiquarian stores of Egypt. It has been observed that, perhaps for the first time, a troop of savants (there were 100 of them) formed part of the staff of an invading army. It appears, however, that artists accompanied the expedition of Alexander the Great to India, 2,000 years previously.

The English Government seem to have had no suspicion of the real destination of the armament prepared at They probably believed that the ships there assembled, were intended to play a part in the great scheme of the invasion of England. However this might have been, they, at all events, sent considerable reinforcements to Nelson, who was then in command of the fleet of the Mediterranean station. And he, at the moment when Napoleon arrived at Toulon, was actually cruising within sight of the port. Buonaparte had learnt by experience of the prowess of the British navy, that to embark in its presence was to rush into the jaws of destruction, and he waited. On May 19th, 1798, fortune favoured him. A violent gale drove the English off the coast, and so disabled some of their ships that Nelson was obliged to go into the harbour of Sardinia to have them repaired. Then Napoleon instantly commanded the embarkation of his troops. As the last of them arrived on board ship, it is related that the sun arose in especial brilliance on the mighty armament; one of those dazzling sunrises which the soldiery afterwards delighted to call "the suns of Napoleon."

That unclouded sun rose on thirteen French ships of the line (the noble old two and three-deckers of the period) and fourteen frigates. Four hundred transports conveyed 40,000 of the best troops of France, with generals whose names were only inferior in reputation to that of the general-in-chief. And the soldiers, mindful of the prestige of the campaigns in Italy, considered his presence as the pledge of victory. On June 10th, the fleet, reinferced by General Dessaix, with his division from Italy, appeared off Malta. The Knights of St. John were no longer those hardy and devout soldiers of the Cross who, for ages, had inspired terror among the Mussulmans and been considered as the heroic outguards of Christendom. Sunk in indolence and pleasure, these inheritors of a glorious name, hardly attempted for a moment to defend their all but impregnable island against the fleet

ing from his course, he escaped imminent danger from the British under Nelson. He, ascertaining that the shipping which had lately crowded the harbour of Toulon had not sailed towards the Atlantic, divined that their mark must be Egypt. His fleet was inferior in numbers, but he pursued without hesitation; and, taking the straight line, arrived off the Nile before any of the French ships had appeared there. Buonaparte had, however, directed the French fleet not to steer for Alexandria, but for another point on the coast of Africa. Nelson, not finding the enemy where he had expected him, turned back and traversed the sea in quest of him—to Rhodes, and thence to Syracuse. It is supposed that on the 20th of June, 1798, the fleets almost



THE SAVANTS ATTACHED TO THE FRENCH ARMY OF INVASION.

which covered the seas around them. Buonaparte is said to have tampered successfully with some of the French knights beforehand. At all events the gates of Valetta were thrown open, and it is recorded that Caffarelli said to Napoleon, as they were entering between the huge rocky barriers of La Valetta: "It is well that there was some one within to open the door for us; had there been no garrison at all, the business might have been less easy."

From Malta—where he left a detachment of troops to guard an acquisition which he expected to find eminently useful in his future communications with France—Buonaparte steered eastwards; but ran upon the coast of Candia to take in water and fresh provisions. By thus casually diverg-

touched each other, but that the thickness of the haze and Nelson's want of frigates, prevented an encounter. Napoleon, reconnoitring the coast, ascertained that there was no longer any fleet off Alexandria, and reached his destination virtually undisturbed on July 1st. At that moment, it is related, that a strange sail appeared on the verge of the horizon. "Fortune," exclaimed Napoleon, "I ask but six hours more—wilt thou refuse them?" The vessel proved not to be English, and the disembarkation of the French immediately took place, in spite of a violent gale and a tremendous surf. They landed at Marabout, a mile and a half from Alexandria, having lost many by drowning. "There is nothing new under the sun," and

the present system of bombarding commercial cities or forts, or invading and slaying a few thousands of the inhabitants of a country, without being at war, was forestalled by the French in 1798. Egypt was a province, then as now, of the Ottoman Empire, which was in absolute peace with France. Of course it was unprepared for this invasion. The Turks, however, shut the gates of the city and held out till the French forced their way through the old crumbling walls, with a loss of 200. Then Buonaparte abandoned the place for three hours to the unbridled licence of military execution and rapine. He had, however, given a "General Order" to the army before disembarkation, in which he had enjoined respect for the people and their faith. "We are about to live," he said, " with Mohammedans: the first article of their faith is, 'There is no God but God, and Mohammed is His prophet.' Do not contradict them; deal with them as you have done with the Jews and Italians. Respect their muftis and imams, as you have the rabbis and bishops elsewhere. The Roman legions protected all religions. You will find here usages different from those of Europe; you must accustom vourselves to them."

To the people of Egypt he addressed a proclamation in these words:—"They will tell you that I come to destroy your religion; believe them not, answer that I come to restore your rights, to punish the usurpers, and that I respect, more than the Mamelukes ever did, God, His prophet and the Koran-Sheiks, and Imams; assure the people that we also are true Mussulmans. Is it not we that have ruined the Pope and the knights of Malta? Thrice happy they who shall be with us. Woe to them that take up arms for the Mamelukes, they shall perish."

Egypt, at this period, was nominally ruled by a pacha appointed by the "Grand Seignior" of Turkey. In reality it was in the power of these Mamelukes, who appear to have been governed by a number of beys, or chiefs, who commanded certain districts. According to their institutions, they were recruited by boys, often captives of European birth, who were trained from their youth in all military exercises; and obtained promotion according to their courage and military merits. They formed a military caste, extremely oppressive to the fellahs, the poor Arabs who cultivated the soil. The Cophts, descendants of the ancient Egyptians, discharged most of the civil functions under this aristocracy of warriors, and held most of the trades and professions, but were also oppressed cruelly by these domineering soldiers. Napoleon considered them to be the finest cavalry in the world, admirably armed with sabres from Damascus, and pistols and carbines from England. In magnificent horsemanship and fiery valour, they were alike conspicuous. With such cavalry and the French infantry, Napoleon is related to have said that it would be easy to conquer the world.

It appears that he was a fatalist, and well disposed to accept the principal article of the Mussulman creed. He

even asserted his belief in the divine inspiration of the Arabian prophet; though he had, indeed, proclaimed his sympathy with all forms of religion with which he was acquainted, including those of the Talmud, Koran and Bible.

On July 7th, 1798, Napoleon left Alexandria, being anxious to force the Mamelukes to a battle. A small flotilla on the Nile was intended to guard his right flank. At some distance from the river the infantry marched over burning sand. The miseries of this march are related to have been extreme. The air was crowded with pestiferous insects. Men's eyes became weakened, or even blinded, by the blazing sunshine and glare of the sand. Water was scarce and bad; and not only the common soldiers, but commanders of such approved gallantry as Murat and Lannes, in rage and despair, trode their cockades into the sand, and sympathised with the angry murmurs of the soldiers. The general, however, is related to have been superior to all evils. Setting an example to the infantry, of which the great majority of his army was composed, he strode along upon foot, followed by his staff. A mounted guard of hussars was in attendance, but the general marched as the meanest of his soldiers. While others were exhausted and suffused in perspiration, although they had rid themselves of their usual dress, Napoleon wore his uniform buttoned up as in Paris, and never showed one drop of perspiration on his brow. He lay down in his cloak the last at night, and was the first to arouse in the morning.

After some days' marching, scattered groups of horsemen began to hover on the flanks of the French army, and death was the lot of all stragglers from the line. The irregular attacks of the Mamelukes became daily more numerous, and the formation of squares to receive their onslaughts became frequently necessary. Careful watches, of course, had to be maintained at night, and the extremes of fatigue and privation were experienced by the troops. Meanwhile it is related that the company of savants, mounted on asses, with their books, instruments, and baggage, were regarded with animosity and suspicion; the idea being entertained that the whole expedition was merely intended to serve some scientific purpose. When, on any alarm, the square was ordered to open and receive the learned party, they were greeted by the soldiers with jeers, such as, "Room for the savants and the demi-savants."

On the 21st of July, 1798, the army arrived within sight of the Pyramids, a spectacle which must have especially consoled the learned for their dangers and sufferings. Below them extended the vast army of the Beys, their right posted on an intrenched camp by the Nile, their centre and left composed of their brilliant cavalry. Napoleon, riding forward to reconnoitre, perceived what escaped the observation of all his staff, that the guns on the intrenched camp were not provided with carriages, and instantly decided to attack the left, where

the guns could not be rendered available. "Soldiers," he is said to have uttered, "from the summit of yonder pyramids forty ages behold you."

The Mamelukes advanced gallantly to the encounter and the French, formed into separate squares, awaited their fiery charges. They seem to have displayed the same magnificent quality of patient endurance which distinguished the British at Waterloo. With impetuous speed and wild cries, the spirited horsemen rushed upon the line of bayonets, backed their horses upon them when they could not be got to face them in front, and maddened by the firmness which they could not shake, dashed their pistols and carbines into the faces of the soldiers. Nothing

the deadly effects of the musketry in the engagement; and he was considered to be the destined scourge of God, whom it was hopeless to resist. Our illustration of this battle represents a brigade square at the commencement of the engagement. As a point of the archæology of costume, it may be observed that, at about this period, commenced the transition age between the breeches and long gaiters of the last century, and the trousers, then termed overalls, of the present. While the breeches and gaiters appear in the French, as in the English army, to have still constituted the full uniform, "overalls" and short gaiters seem to have been worn in campaigning, at all events in this Egyptian campaign, by the masses of the infantry engaged. The



NAPOLEON SHOWING AN EXAMPLE OF MARCHING POWERS TO HIS EXHAUSTED GENERALS.

could move the French, while the bayonet and continued roll of musketry by degrees thinned the host around them. At length Buonaparte advanced; the enemy were seized with panic; their camp was abandoned; hundreds flung themselves into the Nile, while a prodigious carnage ensued. Mourad, with the remnant of his Mamelukes, retreated on Upper Egypt. Cairo surrendered and Lower Egypt was entirely conquered.

Such were the immediate consequences of the Battle of the Pyramids. The name of Buonaparte now spread panic through Egypt, Arabia, and the Soudan. He received the appellation of the "Sultan Kebir," or King of Fire, from cocked hat was still their headpiece; the chaco of the Peninsular war not having yet been introduced.

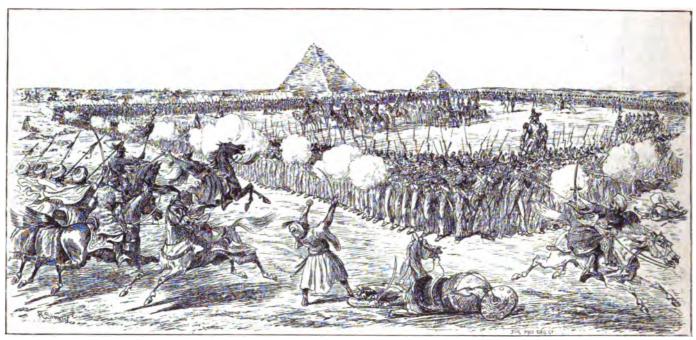
The French received recompenses for the toils which they had undergone. The Mamelukes carried their wealth about in ornaments, and a single corpse almost made a soldier's fortune. Meanwhile the savants ransacked the monuments of antiquity, and formed collections which will ever reflect honour upon their zeal and judgment. In fact, the historical treasures of Egypt were first regularly opened to delight the students of Europe by this courageous band. Napoleon himself visited the interior of the Great Pyramid, and entered its secret chamber. He still endeavoured to

assure the Egyptians that he entirely sympathised with, or even positively believed in, the Mohammedan religion. He is related to have repeated again, in the mysterious interior of the Pyramid, the formula, "There is no God but God, and Mohammed is His prophet." And the bearded Orientals who accompanied him, judiciously concealed any doubts which they may have entertained of his orthodoxy and responded, with due solemnity, "God is merciful: thou hast spoken like the most learned of His prophets."

While Napoleon was thus triumphant, Nelson's magnificent victory of the Nile caused him to exclaim, with a sigh, "To France the fates have decreed the empire of the land, to England that of the sea."

Enduring the calamity with equanimity, he proceeded to organise a system of government under which the resources of the country should be developed to the best

researches. They executed a magnificent Description de l'Egypte, in nine volumes, folio, or twenty-six volumes, octavo, with ten volumes of plates, atlas folio. And scientists also investigated the traces of ancient devices for improving the agriculture of the country. Canals were re-opened which had been closed for centuries, and the waters of the Nile again flowed in the channels into which they had been originally guided by the skill of the Pharaohs or the Ptolemies. Dessaix had pursued Mourad Bey into Upper Egypt, and the Mamelukes had lost heart. The Ottoman Porte however, by no means recognising the right of Buonaparte's interference in Egypt, had declared war against the Republic, and summoned the strength of her empire for the expulsion of the French. As there was still no appearance of a Turkish army in the early part of 1799



A FRENCH SQUARE AT THE BATTLE OF THE PYRAMIDS.

advantage. It must be confessed, in considering the events of the last few years in Egypt, that history has repeated herself as usual. He proclaimed that, having rescued Egypt from the Mameluke usurpation, it remained for him to administer law and justice, until the time should come for restoring the province to the dominion of the Grand Seignior.

He constituted councils of Arabian chiefs, and Moslems of the Church and law. He endeavoured, without increasing the taxes, to render their levying equable, and to secure justice for all; and certainly his institutions seem to have reflected honour on the understanding and unwearied industry of the man to whom France subsequently owed the *Code Napoléon*. Meanwhile the *virtuosi* in his train pursued with indefatigable energy their scientific

Napoleon occupied himself in explorations. He visited the Maronite monks of Mount Sinai, and, as Mahomet had done before him, affixed his name to their charter of privileges. He examined the well of Moses, and nearly lost his life on the sands of the Red Sea, where Pharaoh is supposed to have perished in the pursuit of the Hebrews. "The night overtook us," says Savary in his Memoirs, "the waters began to rise around us, the guard in advance exclaimed that their horses were swimming. Buonaparte saved us all by one of those simple expedients which occur to an imperturbable mind. Placing himself in the centre, he bade all the rest form a circle around him, and then ride on, each man in a separate direction, and each man to halt as soon as he found his horse swimming. The man whose horse continued to march the last was sure, he said,

to be in the right direction. Him, accordingly, we all followed, and reached Suez at two in the morning in safety, though, so rapidly had the tide advanced, that the water was at the poitrels of our horses ere we made the land."

Buonaparte left 15,000 in and about Cairo, and the division of Dessaix in Upper Egypt, and then marched towards Syria with 10,000 of his best troops, with the intention of crushing the Turkish armament in that quarter before their chief force, which was assembling at Rhodes, should have time to reach Egypt by sea. Traversing the desert which divides Africa from Asia, he took by vigorous assault the fortress El Arash on February 15th,

grant them the benefit of their parole, for they had already broken it, after being set free subsequently to the capture of El Arash.

Now, as if Heaven had determined to punish the atrocity of the French, the plague broke out in their camp. Despair took possession of the sufferers; those still in health dreaded to administer aid to them. Napoleon went through the hospitals, breathed hope into the sufferers, and rebuked the cowardice of the attendants, by relieving with his own hands the foul ulcers which no one had dared to touch.

The Pacha of Syria, Achmet Djezzar (which means Achmet the butcher, a title said to have been well earned



NAPOLEON LEAVING THE ARMY OF EGYPT.

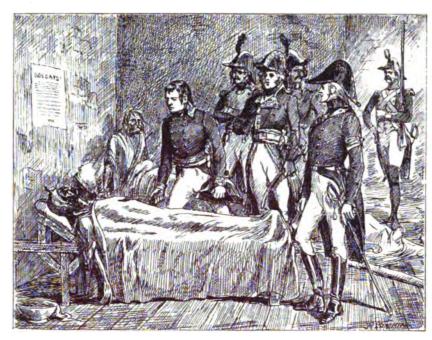
1799, then Gazah, the ancient city of the Philistines. At Jaffa (the Joppa of holy writ) the Turks made a resolute defence. The walls were carried by storm, 3,000 Turks died with arms in their hands, and the town was abandoned for three hours to the fury of the soldiers—who never, as Napoleon allowed, availed themselves of the license of war more savagely than on this occasion.

A part of the garrison which held out longer in the citadel, amounting to 1,200 or 3,000 men, according to different statements, were subsequently shot or bayoneted in cold blood; a dark stain upon the character of Napoleon. He justified himself by saying that he could not afford soldiers to guard so many prisoners, and that he could not

by the mercilessness of his administration) was at St. Jean d'Acre, renowned in the crusades. As previously in Hindustan, when the throne of the Great Mogul was in the power of the Rajpoots, as subsequently on the Black Sea, the Moslem now obtained the aid of Christian England. The chivalrous Sir Sydney Smith was cruising in the Levant with two British ships of the line. On board his ship was Colonel Philippeaux, a French Royalist of great talents, formerly Buonaparte's schoolfellow at Brienne. The pacha permitted the English commodore and this skilful ally to regulate the scheme of defence, as the French advanced upon Acre. Napoleon, however, doubted not that the Turkish garrison would shrink before his

onset: "On that little town," he said to one of his generals as they were standing on an eminence, which still bore the name of Richard Cœur-de-Lion, "depends the fate of the East. Behold the key of Constantinople, or of India."

For sixty days the fierce attacks of the French were delivered upon Acre, but the gallantry of the Turks, aided by Sir Sydney Smith and his noble seamen, finally repulsed them. Caffarelli and



BUONAPARTE VISITING THE PLAGUE-STRICKEN SOLDIERS.

many other officers of the highest importance in Napoleon's army were no more; and the ranks of his legions were thinned by the plague as well as by the weapons of the defenders. In his rage at repeated failures in the assaults, he ascribed, and justly, the whole evil to the presence of Sir Sydney Smith; of whom he ever afterwards spoke with the venom of a personal hatred. Sir Sydney, in requital of Buonaparte's proclamation inviting, in the style which he had adopted, the subjects of the pacha in Egypt to avoid his yoke and ally themselves with the invaders - put forth a counter address to the Druses and other Christian inhabitants of Syria, invoking their assistance, in the name of their religion, against the blasphemous general of a nation which had renounced Christianity. Napoleon is then related to have said that Sir Sydney was a madman, which, being told to the latter, he challenged Buonaparte to single combat. But Napoleon replied that he would come forth to a duel with no Englishman, unless Marlborough could be fetched from his grave.

At length, retreating upon Jaffa, the French army appears in the arid region to have suffered all the miseries of heat, thirst, and continued attacks of the enemy's cavalry. The great victory over the Turks, however, who had landed in the Bay of Aboukir, in July, 1799, restored Napoleon's prestige in Egypt. The charges of Murat, le beau sabreur, the steady rolling fire of the Sultan Kebir, caused 12,000 to perish on the field, or in the sea, into which in their panic they had flung themselves. Six thousand surrendered at discretion.

After this victory, Napoleon, aware of the dangerous condition to which, during his absence, the affairs of France had been reduced both at home and abroad, resolved to intrust Egypt to other hands. He succeeded in preventing

suspicion his intended evasion from arising among the soldiers. When he finally turned his back upon Cairo, it was universally believed that it was only to make a tour in the Delta. On the coast he was met by Murat, and other of his generals, and chief savants. The wind having driven the English squadron of blockade off the coast, Buonaparte and his followers embarked at Rosetta; two frigates

and two corvettes having been saved in the harbour of Alexandria from the destruction of the Battle of the Nile, by Admiral Gautheaume.

A proclamation which the general left behind him announced Kleber as his successor, whose great qualities by degrees reconciled the soldiers to the desertion of their chief. Doubtless in his campaigns the camel corps, or rather corps of dromedaries as it was styled—the onehumped camel of Egypt, not the two-humped of Bactriawas exceedingly useful. There seems to be no actual record of its services, but it is said to have consisted of the picked men of the army. In the campaign of the British against the French in Egypt, in 1801, when General Hutchinson was in command, after the death of Abercrombie, 570 Frenchmen are related to have laid down their arms, with 120 of the "dromedary corps" amongst them. They had been sent out from Alexandria to collect supplies for the army, with some troops of dragoons and companies of infantry, and a light gun.

In Napoleon's parting directions for the internal administration of Egypt, Kleber is desired to cultivate the good will of the Christians, but, nevertheless, to avoid, carefully, giving the Mohammedans any reason for confounding the Christians with the French. "Above all," he said, "gain the sheiks, who are timid, who cannot fight, and who, like all priests, inspire fanaticism without being fanatics."

The conclusion of his parting address is in these words: "The army which I confide to you is composed of my children; in all times, even in the midst of the greatest sufferings, I have received the marks of their attachment; keep alive in them these sentiments. You owe this to the particular esteem and true attachment which I bear towards yourself."

## THE SERVICE CLUBS.

# II.—THE JUNIOR UNITED SERVICE CLUR.



EXT in precedence and rank to the United Service Club, of which we gave a biographical general record in our last number, comes the Junior United Service Club, Waterloo Place, St. James's; of which we propose to supply a similar record for our readers.

The Junior United Service Club may be said to be a relation and offshoot of the elder institution in Pall Mall; but it would not be easy to designate exactly how that relationship should be named. When the senior institution was founded and consolidated, it was felt that its limitation of membership to Officers of Field-rank in the Army, and to their compeers in the Royal Navy, left clubless a large number of their friends and comrades in both Services; and, so far from any jealousy or want of sympathy on the part of the seniors as to the position of their juniors existing, the former came at once and heartily to the assistance of the latter. The result was the Institution with whose biography we are now occupied:

At a Meeting held in the British Hotel, Cockspur Street, on 24th March, 1827, a prospectus was read of the formation of the Junior United Service Club, the document referring in the first instance, though in no unfriendly tone or spirit, to the rank-limitation of the United Service Club; and adding, towards its conclusion, that the proposed Institution was desirable in order to protect the Officers who were to be its members from the vicious temptations and frivolities of metropolitan life; from which, apparently, it was considered that their seniors had been saved. There was no dissenting voice at the Meeting; and two days after, on its reassembling, the prospectus and articles of association were sanctioned and signed, under the patronage of the Duke of Wellington, the Marquis of Anglesea, Lord Hill, Admiral Sir George Cockburne, and other distinguished officers of what we may now call the Parent Institution.

The list of Officers of the Services eligible for election to the new Club is remarkable for its width and liberality. "Officers of the Army and Navy, Marines, Fencibles, regular Militia and the Honourable East India Company's Services; including, in the Navy, all ward-room officers, and the assistant surgeons; Captains and Lieutenants in the service of the Honourable East India Company; and Captains of regular Indiamen." Assistant surgeons in the Royal Navy were in those days and long after, warrant Officers, and held no commission. Of the East India Company's Naval officers who joined the Club about the time of its formation, only one member now remains on its list; the extinction of the Company's Navy having soon after supervened, and stopped both the supply of Officers and the designation in the Club's list of members eligible as above given. The number of members was fixed at 1,500, entrance fee at 10l. 10s., annual subscription 5l. 5s., as compared with 40l. at the present date, and 7l. 7s. In its early days the Club was without a club-house, the building which

was to accommodate it being still occupied by the senior Institution; but after a few years in hired shelter and residence, the Junior was installed in its old house, on the ground where now stands its modern stately edifice, of which we have given an excellent view taken from the south-west angle of the building. On the members taking possession of their club-house, a table d'hôte daily dinner was established; and every comfort and luxury according to the wants and aspirations of those days was provided for the members. In the year 1833 the Library of the Club was founded; its nucleus being formed chiefly by contributions from members.

So founded and housed, the Club prospered and filled until twenty years after its birth; when in 1856 it was unavoidably perceptible and inconveniently felt, that change and expansion were absolutely necessary for the increase and expansion of the Club in several directions; a new house being the primary and most pressing want, with the supply of which, all other desirable improvements and reforms could be initiated and matured. Accordingly, in the above year, it was resolved at a general Meeting, that the building of a new club house should be at once commenced. Mr. Nelson was the architect; and in that and the next year the building was completed, furnished, and fitted up with every modern comfort and luxury, at a cost of about 85,000l. raised by debentures held by Members. The number of Members was increased to 2,000, and the entrance and annual subscription fees ascended to nearly their present amount, as given above.

Small inconveniences have been experienced, and complaints and criticisms have, of course, been heard from time to time as regards the present Junior United Service Club house; but, given the space upon which the house stands, it appears to us that Mr. Nelson's work is, as regards external and internal construction, the division and apportionment of the interior as regards space, comfort, and elegance, very nearly what may be considered the perfection of Club-house building and arrangement.

With the foundation of the Junior, all intercourse between the two United Service Clubs may be said to have ceased, as the United Service Club does not entertain or admit visitors or guests. The two clubs consequently only exchange the annual autumnal amenities of accommodation during repairs, &c., with its neighbour the Athenæum Club. over the way, similarly ruled and constituted as regards hospitality. Opinions differ as to the advisability of entertaining or excluding guests at our first-class Clubs, and we are not going to discuss the question. The Junior United Service provides amply and luxuriously for the entertainment of visitors, and has struck, in the construction of its large dining-room, the happy medium between a strangers' room and the mixture of guests and members, the room where guests are entertained being only pillared off from the general dining-room—an almost imaginary division. It is unnecessary to dwell upon the

excellence of the cuisine, wines, &c., which, it may be said, are equally good in all the first-class London Clubs, and certainly here inferior to none, as all who have enjoyed the hospitality of the Club will admit, and gladly, on occasion, renew their experience.

The rules and bye-laws of the Junior United Service Club are so very similar to those of the other West-end Service Clubs as not to call for any particular notice here; though we may most probably have to make comparative reference to some of them hereafter, when taking a summary view of our clubs in general, and their codes of government and Wellington and Nelson; on the upper landing is Allen's battle of Waterloo, with "not too much smoke"; and in the drawing-room are pictures of our sovereigns, commencing with George III. and ending with her present Most Gracious Majesty and the late Prince Consort. Finally there is a fine full-length picture of the late Emperor of the French, Napoleon III., who was a member of the club, and on a pedestal near the front window is a magnificent work in solid silver, representing Bedouin or Arab life, with obelisk, &c., presented to the club on the occasion of his Imperial Majesty's visit to this country during



THE JUNIOR UNITED SERVICE CLUB.

administration. Suffice it here to say, that these attributes, in the case of the Junior United Service Club, will stand well in comparison with those of any other similar Westend Institution. The rule allowing members employed abroad "on service" to become "seconded" or supernumerary, paying only a subscription of £1 1s. per annum, was passed twenty years ago, and has acted well for the interests and advantage of members generally.

The Club-house contains within its spacious and lofty rooms many fine objects of art in painting, sculpture, &c. In the beautiful hall are, on either side, marble busts of the period of the Crimean War, 1855, as recorded in the inscription on the plinth. In the Writing-room, on the same floor, are several portraits of distinguished British Officers, Naval and Military. The visitor has from this room but a few steps to make to the Smoking-room, which we are inclined to think is nowhere surpassed in size, comfort, and elegance. Adjoining are the Library and Billiard-rooms. The entire club is, on all week-days, open throughout to visitors—ladies of course being especially welcome—under the guidance of a member.

JAMES C. DICKINSON, Retired Staff-Surgeon.

# RECOLLECTIONS OF THE RED CROSS.

#### BY MAJOR BURGESS, LATE H.A.C.

(Continued.)



HERE was a general belief in France that the Germans would be hopelessly beaten, notwithstanding their continued advance; and amongst many instances of this was when a group of those who in the early days of the war had sought refuge in

Brussels were speaking of the certain victory of France, a Deputy said, "Pour ces Prussiens, messieurs, nous allons les flanquer au delà du Danube." An Englishman of the company venturing to question the speaker as to his knowledge of the locality of the Danube, merely provoked the reply, "Est-ce-que je suis tenu de savoir ou est le Danube—moi?"

Nevertheless, our English Society decided to let Germany alone, and to map out France into districts for the purpose of aid to the wounded. Of these the largest and most important was what we called the North-Eastern District, under the superintendence of Henry Brackenbury, whose head-quarters were, from time to time, Brussels, Arlon, Saarbruck, Metz, Meaux. Under him were eighty-two agents, of whom thirty-two were surgeons and dressers, besides eleven lady nurses and nine sisters of All Saints (Margaret Street), two couriers, and eight men of the Corps of Commissionnaires. Perhaps the hardest and roughest work of all in this hard-working company fell to the lot of the Convoy Agents, who had to carry relief to outlying depôts, hospitals, and ambulances—a service at all times difficult, generally dangerous, and requiring much tact, energy, pluck, and endurance.

"The depôt at Meaux was under charge of an English gentleman, a retired captain of Austrian Cavalry. Under him were two officers retired from our own army, a Cambridge wrangler reading for the bar, a clerk of the House of Lords, a captain of London Scottish Volunteers, a banker's clerk, and a medical student. . . . In spite of this strange mixture of classes and professions," wrote Brackenbury, "so well has the staff been selected, that among all those sent out by your committee, amounting to over 100 in my district, there has not been one case of dishonesty, and scarcely one failure of any kind."

The duty of selecting the staff for service, both abroad and at home, having fallen upon me personally, it was gratifying to find one's judgment so little at fault. It seemed to me a remarkable feature of our work in 1870-71 that every man of our employés, whether in London or on the Continent, no matter what had been his previous history, at once fell into the place assigned

to him, and, keeping touch, so to speak, of his right-and left-hand man, took up the thread of the work as if he had been at it from the very beginning, and worked on as if impelled by only one idea—not a wrong one—to do his best towards bringing the most useful aid as expeditiously as possible to those in distress, and to the credit of old England. It was no question of pay for services: that was not enough to attract any one. Of all the men working under me in London, no two had met before. They dropped in one by one and offered to help me, their honest face and bearing their chief introduction. I gave them something to do requiring immediate attention. They did it, and were



LIEUT.-COLONEL LEWIS JONES.

kept on at that work. Some could not do it, and they at once said so, and left in regret. A barrister offered his services. I handed to him a large bundle of letters which had been placed aside through a sheer impossibility to attend to them: he spent some patient hours over them, brought them back to me, said he was sorry he was beaten, shook hands, and left. A young clergyman came. I handed him the same bundle, and left him to his own devices. He divided them into pressing and not pressing; wrote to the pressing ones legible, concise, practical, and withal gentlemanlike answers, brought them for my signature, endorsed those answered with precis, sorted and pigeonholed

them. The Rev. Mr. Grove remained. The way in which every man of my scratch crew fell in and worked was really wonderful. It would have been utterly impossible to get through the enormous mass of work if one had had to tell people what to do and how to do it. There was no time for teaching; and all these men at home, clerks, civilians despised of the military—can never have too much praise for the intelligent loyalty with which they came to the aid of soldiers in deep distress. A business man of Dover, Mr. William Forster, not only gave as his contribution his free services in forwarding to the continent our daily quota of stores, arriving, thanks to the Charing Cross station-master, by every passenger train at Dover, but also placed at my entire disposal in London, until

abroad or at home. It seems a mistake to have let them all go adrift as if one was disgusted with them, and to begin all over again whenever the Society may wake up again.

The agent who went abroad in the Society's service was provided with a brassard made of india-rubber, with stiffened ends to lace up, having on it the Red Cross in cloth, and the official stamp of the Society; whilst inside was recorded its number, the date of issue, the name of the person to whom it was issued. He was also provided with a parchment commission, a Foreign Office passport and a short letter of route and instructions. Finally, he received a month's pay in advance, at the rate of 1l. a day, and a pay-sheet which served as a letter of credit.



CARRYING AWAY THE WOUNDED, OLD STYLE. COLONEL SIR HENRY ELLIS, 23RD ROYAL WELSH FUSILIERS, BEING TAKEN OFF THE FIELD OF WATERLOO.

the end of the war, his own clerk, Prescott. Not one farthing of money, not one handful of stores, went astray. As an instance of smartness which I challenge any of our Government Departments to equal with their armies of clerks; I received a telegram for 250 iron beds for the hospital at Pont-a-Mousson: forty-eight hours afterwards these 250 beds, which had to be found, packed, and convoyed, arrived at their destination. We who served the Red Cross here in London may fairly be proud of such work. It has always been a matter of regret to me that Colonel Loyd-Lindsay did not institute an annual meeting of some sort for every person, high or low, rich or poor, soldier or civilian, who has served the English Society

Some strange notions prevailed as to the Red Cross. More than one complaint reached me that the combatants did not both cease fire when a civilian wearing the brassard found that his duty to the wounded had brought him between two fires. A letter of personal recommendation seemed to carry more weight than the brassard and parchment commission, and persons of the highest position, including Monsignori of Holy Church, deemed it advisable to apply to me for such a letter, to supplement, if not to supersede, their official dress, and the usually talismanic F.O. passport. In one instance the absence of such a letter brought out the readiness of resource of a young Englishman with whose name as Coroner for Middlesex

the public is now more familiar. In the early days of our Society Dr. G. Danford Thomas left London in charge of hospital stores, and, after innumerable difficulties had been surmounted, reached the German lines, but only to be there stopped for want of the necessary pass. Always bearing in mind that Bis dat, qui cito dat, was the essence of his mission, he was unwilling to wait until such a pass could be procured; he showed in turn every document he could muster, but without avail; at last he triumphantly produced from the recesses of his pocket an expired season ticket of the Southern Eastern Railway Company, and, pointing to the signature it bore, boldly claimed its recognition. The authorities, impressed with the demeanour of the doctor, recognised the document bound in its imposing leather cover as some special authorisation, and with great deference they passed him through with his convoy.

Sometimes, however, our convoy agents met with obstacles impervious to savoir faire, and only to be overcome by patient and good-humoured perseverance. During the exceptionally severe winter of 1870 Major Lewis Jones (the "Inkermann Jones" of Crimean days) undertook, at my personal request, to convoy sixteen tons of stores to the Woolwich Ambulance at Versailles; and on Christmas Day, 1870, left Havre with eight country carts, eighteen horses, nine French drivers, and a young English assistant (Mr. Tweddell). The leading cart bore the Union Jack, the rest the Red Cross flag, and before the day was out all were stopped by a post of francs-tireurs.. Next day the party had got about nine miles on the road when Prussian dragoons appeared, unslung carbines, and proceeded to question. Eventually getting rid of these inconvenient attentions, the convoy reached Barentins, where more Prussians searched the calèche and the waggons. Starting next day in a heavy snowfall, with a bitter north-east wind, Rouen was reached, and with it the head-quarters of General von Bentheim. "He was," writes Jones, "most charmingly polite, but most obstinately firm in refusing to allow us to cross the river to Elbœuf, and so pass into the French lines again, alleging, with great justice, that, although willing to help us and the objects of the National Aid Society, he could not allow the French drivers to return to the French lines after having walked right through the country occupied by his army." Meanwhile all the stables in the town were full, so "the horses were packed under a shed, hock deep in half-frozen slush, and as they could not sleep, they amused themselves as only French horses can. My room was over them, so that I had a lively night of it; those horses behaved as if possessed of evil spirits; at intervals one of the drivers came and laid about him with a whip, then there was peace for a few minutes. Soon they began again, and I got but little sleep that night at Rouen."

In consequence of the general's decision the route had to be altered; and starting again on the 28th, the convoy

arrived at three o'clock at Fleury-sur-Andelles. The only hotel was shut up; there was no room anywhere for either horses or men. It was snowing fast, the horses were done up after their night's fighting, succeeded by seven hours' tug through deep snow. On the 29th it took an hour and a half to get up the first hill: the whole country as far as the eye could reach was one unbroken sheet of snow: the air was full of snow crystals, which cut the face like bits of glass, driven as they were by a bitter north-easterly gale. The breath froze on the moustaches till they felt quite heavy and brittle, and icicles hung from the horses' noses. On the 30th the cold was more intense than ever, and on going to breakfast in the calèche, with good appetites, the staple cold goose was found frozen hard, the bread was frozen, the water was frozen. At last arriving within two days of his destination, the only bridge



MAJOR DE WINTON.

whereby the Seine could be crossed was found broken down. There was no help for it but to return to Rouen. It was midnight before the last cart crawled in to Tillers, and so difficult was the ground that sometimes eight horses had to be put to one cart. On the 1st January the road to Elbœuf was found to be barricaded; the country people swarmed round the waggons, demanding food; refusal led to an incipient *émeute* which was promptly suppressed by the timely conduct of two of the horses, which, supposed to be on friendly terms, had been allowed to feed out of the same wheelbarrow, and had suddenly begun to fight. At five o'clock in the evening a Prussian regiment was met with, marching towards Rouen. "I told the commanding officer that I wanted to cross the bridge at Elbœuf. He laughed aloud and said 'We blew up the bridge at Elbœuf this morning.' Here went my last hope. On the 2nd I presented myself at the general's office at Rouen and told the chief of the staff that I wanted to go back to Havre, and so viâ England and Belgium to Versailles by that route. He said he could not authorise my return to Havre, but I might go to Dieppe." After two days' march Dieppe was reached, and the 213 cases intact shipped for Newhaven, after considerable difficulty in obtaining authority for the shipment. On the 5th the stores were landed at Newhaven. In a day or two they were all re-embarked at Dover, and a new journey commenced. At Ostend, Conz, Saarbruck, Metz, and Frouard all sorts of difficulties arose, to be overcome only just in time, for as the last van of the train carrying Jones and his convoy cleared the bridge at Toul it went into the air, blown up by the irrepressible francs-tireurs.

"It is not," he wrote, "at any time a very pleasant thing to go over a railway-bridge the arches of which are already blown up, and merely two planks laid across from one broken ruined pier to another, but particularly when it comes to the chance of these planks being half sawn in two, so that the whole of your train may simply drop down. I passed a very stifling night in the lamp-porter's room at the station. It was the only hole one could find to put one's head into." At last he arrived at the very bridge from which a month before he had been turned back. It had been blown up; planks were laid across from one broken pier to another, and shook and trembled as his waggons passed over. On the 28th January, 1871, Versailles was reached. Not a case of the 213 placed in Major Jones's charge on the 13th December, 1870, was missing. How any of them ever arrived was to him, he said, a miracle. "Non nobis, Domine," was his soldierly way of giving thanks for his well-earned success.

The proposition of M. Dunant, as discussed on February 9th, 1863, by the Geneva Society of Public Utility was, "Whether means might not be found to form, during the time of peace and tranquillity, relief societies, whose aim should be to help the wounded in time of war, by means of volunteers—zealous, devoted, and well qualified for such a work;" and the theory adopted by the International Conference of October 26th, 1863, at which the Red Cross was founded, was that "At every period, and amongst all nations, from Cyrus down to Napoleon III., the personnel and matériel of the Army Medical Department, or the corps analogous to these, charged with the care and transport of the victims of war, have been insufficient."

On August 22nd, 1864, an official convention was sent out for adherence by the various European governments, and was signed by Great Britain on January 17th, 1865; but the nation did not give effect to the signature of its government until August 4th, 1870, the twenty-fifth on the list of adherents.

At that date the public of this country took less interest in, and had less knowledge of, military matters than now; it is, therefore, not surprising that whilst our National Aid Society had in its employ between forty and fifty officers and men of the regular forces, only six of the Militia or Volunteers were in its service. It was not until after the close of the Franco-German war, and when the Committee had come to a decision—which I must always regard as unfortunate and wrong—namely, to adopt a policy of absolute inactivity, that I had time to consider what was to be done in the way of some practical outcome of our operations during 1870-71. Then I concluded that an extensive teaching of the first principles of aid to the wounded in war must be brought about through the Volunteer Force. The encouragement received was discouraging. Captain W. V. Fox of the Cheshire Volunteers, and one or two others, were the only men who seemed favourably inclined, and for the moment I felt obliged to let it drop. But eventually Mr. Maclure, of the London Scottish, kindly placed at my disposal a room in his warehouse at Queen Victoria Street, and we held a meeting there, at which we, with Surgeon Sandford Moore, A.M.D., Mr. Lambton Young, of the Royal Humane Society, Mr. J. S. Young, of the Commissariat Department, and about a dozen surgeons of Volunteer corps, formed a nucleus for a new movement, the object of which was to organise a systematic training of Volunteers as Sick-Bearers, so that in the event of this country being at war, the notoriously deficient corps of Sick-Bearers of the A.M.D., might be at once supplemented by trained men from the Volunteers. Subsequently the Society of Arts allowed us to meet there to further the object, and a correspondence ensued between myself and the War Office, and between Colonel Gordon Ives and the War Office. The result is that every Volunteer battalion with any pretension to efficiency has now its Sick-Bearer corps, recognised, and indeed assisted, by the War Department. For his excellent services in striving to perfect a highly necessary organisation, Lieutenant McClure of the London Scottish, has just been presented with a handsome testimonial in the shape of a large, richly ornamented punch-bowl. May he live long to enjoy its contents in the company of his numerous friends and admirers!

Several gentlemen have claimed credit for this movement, but to those here mentioned the credit is really due. As a full report of the meeting was published at the time in the *Volunteer Service Gazette*, there seems less excuse for laurel stealing.

In the absence of any such trained men in 1870, our English Society had to seek for the best available material for the purpose—medical students of certain standing, but not fully passed as surgeons, to work under qualified surgeons.

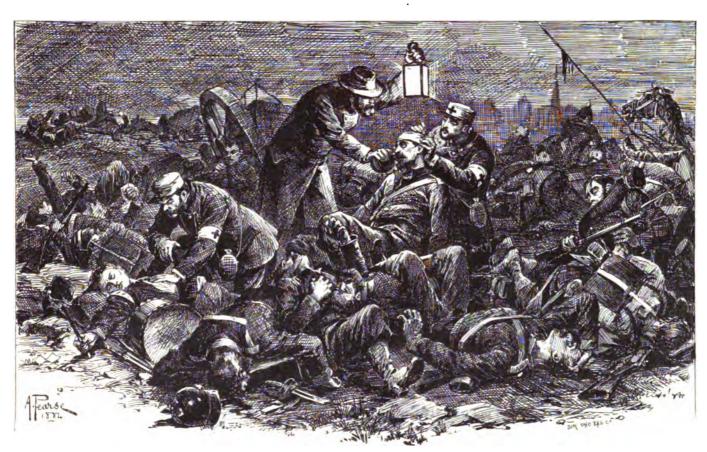
Possibly of all our younger medical officers the most striking history was that of Pratt—not the surgeon of the Anglo-American Ambulance, but a boy-student of Edinburgh, son of General Sir Thomas Simson Pratt, K.C.B., formerly of the 26th Cameronians, a lad who had

left London for Paris on the 11th August, 1870. It is a story bound up with a name not less fatal to France than Sedan—Metz.

"Now on the place of slaughter
Are cots and sheepfolds seen,
And rows of vines, and fields of wheat,
And apple orchards green."

Yet most of us may recollect how, on the 2nd August, 1870, a special train took the Emperor, Marshals of France, Generals, and other high functionaries, to witness the heir to the throne undergo his baptism of fire—how at Saar-

on the war. In April, 1869, I was at Berlin at the International Conference of the Red Cross, to which I had been invited by M. Moynier, and I had there opportunities of personal conversation with men of all classes and professions, from the great Chancellor himself downwards. I returned to London fully convinced of the unalterable determination of the Prussian mind to make war upon France at the earliest possible occasion. The occasion did not naturally arrive soon enough, and consequently Germany made one in July, 1870. It was then a mistake, as read by the light of subsequent events, for France so to act as to appear the aggressor.



THE BATTLE-FIELD OF REZONVILLE AT MIDNIGHT, RED CROSS AIDES AT WORK AMONGST THE WOUNDED.

bruck the child was made to direct the first mitrailleuse fired at the Germans, and how swiftly and how terribly Nemesis came to all the actors in that theatrical performance. It was said at the time that the shock to the boy's system was greater than it could bear, and that he returned in the special train to dinner a shattered and hysterical lad. From first to last Fate was hard upon him; adversity pursued him to the bitter end, and his personally undeserved misfortunes must for many a year remain in the memory of England, in whose service he met his death.

The affair at Saarbruck was unfortunate, insomuch as it helped in making it appear than France had forced

Well, Mars-le-Tour and Rézonville had been fought, and nine miles of dead and wounded lay before Metz.

"Hurrah! for the great triumph
That stretches for many a mile."

To complete the day's butchery, the Germans made at 8 o'clock at night a wanton and useless attack, necessitating a mitrail fire by the French in reply. It must have put many a wounded man out of pain as he lay helpless "on the slippery swamp of blood." By midnight there was silence. Over the battle-field the only sound, if sound it could be called, was a low, long, horrible, quivering moan, the help-

less groan of misery too heavy to be borne. Here and there a voice shaped itself into a half articulate appeal for still worse sufferers-mother, wife, child in the now desolate home. But there is a dull light flickering over this scene of unutterable, unnecessary misery. What is it? The ghouls of the battle-field at their fiendish work? Nay, something better. Three Englishmen, Ward, Pratt, and Robinson, come with some citizens of Metz to succour the wounded. Two doctors and a war correspondent! England's contribution towards staunching nine miles of blood! How was this? Only the old, old story. England was not ready. She would not have a Red Cross Society. It was "a visionary and Utopian scheme," even our Generals said, in spite of Crimean warnings. All very well for those foreigners perhaps, but not the sort of thing for blustering John Bull, whose sole panacea for every ill is money. We were not ready: and even when in an outbreak of excitement a National Aid Society had



MR. GRIMSTEED, STATION MASTER AT CHARING CROSS.

been founded, its life was strangled out directly the immediate danger had passed. Can greater, more culpable folly be conceived? The present inanity of our great Society is due to War Office influence—that "dogged resistance of bureaucracy," which has more than once brought the nation to the very verge of disaster, and which invariably results in increased taxation and proportionate discontent.

Surely Ethelred the Unready is the typical and most popular monarch who ever reigned over us!

Our little band of Red Cross men had brought bandages, lint, brandy, wine, water. The water soon gave out, and on going to the brook near by for more, it was found filled with blood and choked with the bodies of men who, in their scorching thirst, had crawled there only to die. The one lantern revealed horror upon horror: here a heap of dead to be turned over to find where that moan came from; there a soldier half cut away, and yet living.

The little stock of supplies is soon exhausted, even a favourite weoden pipe being pressed into the service to tighten a bandage, and the poor wretches must be left till the morrow. Will the morrow bring horse, foot, and artillery to pass over them as they lie? Heaven and von Moltke only know.

On the 18th August came St. Privat, or Gravelotte. "Right well fought all the Frenchmen who fought for France that day." Pratt found himself with the ambulance which received the German fire. "The horrors of war," wrote the correspondent of the Manchester Guardian, "are intensified to a pitch beyond the power of the most devilish imagination to surpass; men are killed over and over again; they go through the horrors of death many times, and what with their generals, and what with their doctors, it's a wonder there are any left. Certainly Glory is very beautiful when encountered in a shelled ambulance."

Mercy floated over the Palais de Justice—at the Jewish schools the same ensign; in tents, under trees, in trains of railway vans, in hotels, in private houses—everywhere the wounded; and everywhere, too, Gentile and Jew, Jesuit priest and Protestant pastor, married wife and religious sister, rich and poor, all working together for the wounded under the sign of the Red Cross.

Then water came "down from heaven and up from the Moselle," and wounded were drowned in their beds. At Polygon Hospital, where Pratt was, the beds were soaked, and patients died by scores. Before the middle of September Metz knew that it was shut up. Soon it heard of the fall of the Empire and of the disaster at Sedan; then food became scarce, and horses were sold at four francs the Worst of all, tobacco failed—the rich man's luxury, the poor man's necessity, the wounded soldier's "medicine in sickness, and love, and life, and rest." Pas de tabac! The blockade was indeed complete. How to communicate with the outer world? Robinson made paper balloons. The first came to grief, the next got away with 25,000 letters, then one with 45,000, then another with letters and pigeons—the Prussians got them all.

All this time we knew nothing of Pratt. Anxious relatives were daily asking for news of him. I could give none. The Duke of Manchester had come, in the early morning, straight from the continental train to tell me what he saw at Balan, Sedan, Bazeilles, and the now historical Chateau de Belle Vue at Fresnoy. Dr. Evans had related to me how, not one moment too soon, he had been able to hurry the Empress out of one door of the Tuileries, whilst the people, infuriated by despair, were at another door rushing in to wreak mad vengeance on the wife and child of the unfortunate Emperor, how, by a ruse, Evans had got them away and put them on board the freest and safest of all territory—an English gentleman's yacht. Couriers and agents had come and

gone again. MacCormac had told us of the splendid work of the Anglo-American Ambulance. Brackenbury had more than once shifted his head-quarters as the tide of war flowed on, but one and all could give no tidings of young Pratt. Then one day there reached his family, not a balloon letter, but a piece of the paper skin of the balloon itself, and on it a line of welcome writing.

At last after an absence of several months, a shadow with a greenish lead-coloured face, and rags of indescribable hues, limped with the aid of a big stick into my office and offered me a bony hand. I grasped it, and waited for the wan figure to speak. It said, "Pratt." It unfastened its outer rags, and showed the bright Cross of Honour. It drew from its pocket a yet higher prize—a shred of the colours torn up lest they should fall into the enemy's hands, and distributed throughout the regiment. It speaks well for any man that foreign soldiers should so honour him. This one had won his Cross on the field, where in the exercise of his noble calling he had been hit; typhus supervened, and with the capitulation of Metz, he, useless for further service at the moment, bade adieu to the soldiers to whom his unfailing high spirits, good temper, and brave humanity under fire, had made him—a foreigner—a true comrade. Son of a soldier, he has since joined the army in which his father rose to high honour, and at the moment that I write he is charged with a duty of national importance in Egypt, as personal medical attendant of "our only general," who possesses in an eminent degree the instinct of choosing the right men to serve him, and the virtue of never forgetting them when they have done that duty.

Perhaps some day a broader spirit may come over our insular Foreign Office Regulations, and Pratt may be able

to wear the Cross of Honour that he fairly won in the field before Metz..



SURGEON-MAJOR W. S. PRATT.



## THE GERMAN COLONEL.

#### A REMINISCENCE OF THE FRANCO-GERMAN WAR.

BY A. F. GUIBAL.



WAS taken a prisoner at the third battle of Orleans, and with numbers of my compatriots of all arms, was "put up" in the Cathedral. Escape seemed impossible, and as it never entered my mind that I could accomplish the feat, I never gave it even as much as a

thought. There we were, hundreds of us, worn out with fatigue, hunger, and cold, packed as sheep in a pen, with no alternative before us but to wait till we should be marched off to Prussia. Through the iron gates of the

building we could see the would-be hospitable and kind-hearted citizens, but they could do nothing for us; they were even prevented from handing us whatever bread, meat, or fruit they had brought with them.

Suddenly, turning round in the semi-darkness of the corner where I stood, I saw a Zouave, who, with his head tied round with soiled rags, seemed weaker than the rest of us. I could do very little for him; but remembering that I had in my vest

pocket both lint and bandage, I at once proceeded as best I could to tend his wounds. Then it struck me that I might turn this incident to good use. So, having previously thrown off both my jacket and cloak, I approached the railings that stood between me and liberty, and waited till the sentries had been relieved. The new guard had scarcely been there five minutes, when I boldly advanced towards them. I need not say that "bayonets" was all I met with. I argued, and gesticulated, and pointed to the soiled rags in my hands, to my short sleeves, to my bare head, repeated times upon times,

"nicht prisonnier;" it was of no avail. Well, I was not disappointed, I had expected it would be so.

I then went to the railings which fronted the square of the Cathedral, and waited patiently. Soon, on the pavement, some ten yards off, there passed a German officer; was he a captain, a colonel, a general, or a marshal? I neither knew nor cared. I shouted, "Eh, Monsieur! Colonel! General! Monsieur! officier!" The last appellation, I thought, was bound to be correct. He turned round, and as, at my request, my co-prisoners had withdrawn from around me, he could plainly see me, standing

alone, the very picture of a private saluting: my left hand on the couture du pantalon, my other one above my right eye.

Now this colonel (I afterwards knew his grade) must have had agreat deal of the milk of human kindness in him. He came to me and asked me in perfect French, "What do you want?"

"Sir," I replied,
"I am not a prisoner.
I came in here a
few minutes ago to
tend an unfortunate
fellow's wounds;
these are his rags.
In the meantime

the sentries have been changed. The fresh ones do not know of my having come here quite lately, and they refuse to let me out again."

This was a great lie, no doubt, but "qui veut la fin veut les moyens" in circumstances like these. At any rate, the colonel did not half believe me, and no wonder. He looked at me from head to foot. I saw a cloud pass over his countenance as he noticed my leather leggings and spurred boots.

"Oh," I said at once, "if you doubt me you can send a man with me to the ambulance over there (this meant across the square). Many of your soldiers, who, like me, were wounded at Coulmiers, but who, unlike me, have been slow to recover, are there still. They will know me. I was a medical student before I enlisted, and when I got better they have found me a very useful man."

And I did look the colonel straight in the face. Indeed, ever since, at the memory of my boldness I always have fancied I was intended to be a prime minister. Anyhow, "Come along," said the colonel. He then ordered the railing gate to be unlocked, and preceded me towards the picquet at the porch, a little to the left. I must confess I felt rather uneasy then. Not that he could have done much harm to me; at most he would have sent me back to whence I came, and recommend me to the mercy of the officer in command of the batch, of which, on our way to Germany, I would be one. But I feared lest I should be defeated in my attempt.

However, I heard him, as we reached the guard, utter the most unearthly sounds, which sounded as angel's music to my ears, for I suddenly saw the sentries present arms. I would not for all the world have missed the pleasure I experienced as I passed between them.

Once out on the pavement I turned round, and saluting, not as a soldier, but as a civilian: "Monsieur, agréez mes remerciements les plus sinceres," I said; and I bowed. I

felt that, had he even had the intention to accompany me, this would disarm him. He returned a graceful "à votre service," and I walked away, thanking Providence, but regretting that circumstances had led me to deceive a man who, no doubt, was a perfect gentleman.

I walked straight away to the large building which, pro tem., had been turned into a hospital, entered it, and, without so much as knocking, opened the door of the porter's lodge. No one was there. I at once pulled my boots off, and noticing a pair of trousers on the bed, took mine off and put those on. A loud burst of laughter made me turn round. There stood before me a young lad some five feet four in stature. He was in convulsions. He pointed to me, and called, "Oh! I say, daddy, come here!"

This was a fix. Was I from the hands of the Prussians to pass into those of the police? "Daddy" came. "Hush!"

I cried to him; "Hush!" and I pointed to my boots and unmentionables on the floor. He closed the door. He had understood, I was saved. Bismarck himself might have come now. I was a private gentleman again, and I looked amorously on myself. Not that I was much of a picture to look at, attired as I was in what might be called a long pair of bathing drawers. But my host was also of a kindly nature; he was, further, a Frenchman; and one hour later I was, if not a swell, at any rate, very presentable.

Two days afterwards my fellow-countrymen of the Cathedral were marched off in squads of twenties, fifties, and hundreds. I was able to say good-bye to those who had facilitated my escape, and to give them a word of sympathy. Suddenly, as one of them shouted to me, "Never mind, you've done the old fool, anyhow!" I became conscious of a pair of eyes steadily scanning my features.

These eyes belonged to the "old fool;" the "old fool" had cars as well, and, worse still, a perfect knowledge of French. Now this term "old fool" was hurtful to me as applied to him, and it was with sincerity that, approaching him, I said, "Monsieur, kindly excuse my friend, he has no reason to feel towards you the gratitude I feel." fancied I saw a slight smile pass over the colonel's lips.

"Did you deceive me?" he asked.

"I did; would



you not have done the same to me?"

"Ay," he replied, "but would you have believed me?"

I felt the cut; it was delicately given; there was no parade to it, so I stood silent. "However," he continued, "you did it well. If I can be of any service to you, come to the commandantur and ask for Colonel ——."

He was true to his words. When the armistice was signed he gave me a passport through the German lines to the gates of Paris.

I have forgotten this gallant officer's name. I had hoped to meet him in private life and prove to him I had not forgotten him. Should he perchance be alive and read this and remember, let him write a line to the office of this paper, addressed to

A. F. GUIBAL, Care of the Editor.

# SHORT SERVICE AND THE EMPLOYMENT OF RESERVE SOLDIERS.

BY CAPTAIN C. W. WHITE.

(Continued.)



NE great object of those who rule the destinies of the army is, presumably, to keep up a constant supply of recruits physically qualified not only to undertake, but actually to perform, the duties of soldiers under all the exigencies of

service. This can only be done by rendering the service popular with the classes from which the rank and file are drawn.

There are some who contend that under the shortservice system this end has been attained, and that, after a long period of "probation," the Enlistment Act, introduced by Lord Cardwell and since modified from time to time to meet the wants and requirements of the hour, has produced results not only satisfactory in the past, but encouraging with respect to the future.

Be this as it may, short service has been the established system of enlistment now for a period of over ten years—long enough to enable us to estimate its results, so far as they concern those whom the system more immediately affects—the men themselves who serve, and have served, under that system.

The evidence I formulated in my last paper is no overdrawn picture of the state of a large proportion of those who have at one time or another served with the colours, and who are now thrown back, or have of their own free will gone back, into civil life, on the completion of their colour service.

I do not deny that in very many instances the army Reserve man of good physique, steady habits, and good character, experiences little difficulty in settling down to civil life. Once let him get a fair start and he will, in nine cases out of ten, become a quiet and respectable member of the community.

It is the start that he needs so much, but it is the start which the State has hitherto failed to give him. To be sure, the man has his deferred pay, no inconsiderable advantage some will say. But it is this advantage which frequently mars his prospects, and instead of benefiting him, ruins all his chances of maintaining the character which it was easy enough for him to earn whilst under the restraints incidental to military life, but which it is difficult for him to keep when once those restraints are withdrawn.

As the police-officer mentioned in my first paper showed clearly, the inherent weakness of human nature is such that what is intended as a boon by the State becomes in the hauds of many men anything but the blessing which its donors expected it would prove.

What is really wanted is organization—some organization which will ensure the man being protected against his own folly.

It is this organization which it is the wish of Sir Donald Stewart, and those who have supported the scheme inaugurated by Colonel Chapman, to supply.

Let the cost be what it may, this organization must be provided. The weak point of Colonel Chapman's scheme is that it is proposed that the "sinews of war," i.e. money, should be subscribed by the officers themselves.

Now, I hold that the State should be ready with the allnecessary funds, and until the State recognizes its duty in this matter, no scheme, however well it may look on paper, can possibly work satisfactorily when put into practice.

It should be remembered that the soldier, whatever his faults, failings, and weaknesses may be, renders the State valuable service. Doing duty in varied climates, and under trying circumstances at times; separated from his friends for years together, and leading a rather monotonous, if not an idle, life, allowances must be made for him if he does now and again "go to the bad," more or less, when his liberty is regained. It is the duty of the State, though, to step in when it can and endeavour to "keep him straight"; and until the State recognizes this, however strenuous the exertions may be to perfect it, the new system can never be pronounced a success. It must be remembered that it is to the advantage of the State that the system should work well, and to call upon individual officers to subscribe funds to enable the War Office to carry out its obligations is a course of procedure quite unworthy of a public department.

Some, doubtless, will urge that the question of short service and the employment of the discharged soldier are subjects to be treated under different heads.

Such, however, is not the case, for the whole conditions of service have been altered by the adoption of our modification of the German system, and it is to this, and this only, as the men to whom I spoke lately, impressed upon me most carefully, that the serious disadvantages under which they labour are entirely due. In the old days there was not the same amount of competition for civil employment, as fewer men were passed through the army, and there was no Reserve Service to be provided for. A man who took his discharge from the army after his twelve or twenty-one years, knew that he had left it for good; he,

unlike the Reserve man of to-day, was under no liability to rejoin the colours.

And in the old days the demand for men not being so great, the physical standard was much higher than it is at present, whilst the long service soldier of ante-reform days had a pension to fall back upon, which helped him to keep starvation from the door.

All these things should be borne in mind. The casual observer may overlook them, the official after-dinner speaker may find it to his advantage to do so, but the professional critic has to take cognizance of all arguments, facts, and contingencies. Those to which I refer constitute a most important feature in a discussion which I have throughout been most anxious to treat without prejudice, and with but one object in view, the ultimate welfare of the State, to whose advantage it is, so long as it maintains a standing army, that the ranks of that army shall be filled with a body of contented and efficient soldiers.

We have to deal now with the present, not with the past, and it is only right in the interest of the individuals whose prospects in life are affected, that the whole question should be approached in a liberal spirit, free from the petty considerations which, I regret to say, are only too frequently dragged in by writers in some of the most influential of our journals, notably the *Times*.

It is not a question of which War Minister has been the wisest and most far-seeing, or which General is the ablest and the best. The points at issue are simply these. Under the short-service system, does the State get its money's worth and do the men enrolled under that system to serve as soldiers obtain fair treatment? It is my object to dispose of these questions and to show in what way the public can assist, if they are so disposed, in bringing about changes for the better—i.e. changes which, whilst lightening the burden borne by the tax-payer, will at the same time prove beneficial to the army, the efficiency of which is a matter of the highest national importance.

Some of course will say, that the youth of the German Empire have to submit to the same inconveniences as our own Reserve men; indeed, that their position is worse, as they are allowed nothing in the shape of deferred pay and pension when they pass into the Reserve. The two classes, however, can scarcely be considered analogous.

But before I proceed further, it will be necessary for me to compare the working of our own and the German system with a view of ascertaining where the weak links are to be found in our own chain, for weak links certainly exist, and it is to be feared their weakness will show a tendency to increase rather than decrease unless remedial measures are adopted.

Our system is held to be a copy of that which obtains in Germany. But the most steadfast believer in the principle of short service must allow that, as compared with the German system, our own is defective.

Some there are who, when assured of the failure of our

short-service system, seek to get over the difficulties which any argument on the subject presents, by saying that the keeping up of a long-service army became an impossibility owing to the death of recruits; that short service and a Reserve was forced upon us; and that we must therefore accept the logic of facts.

This is, no doubt, a very easy way to dispose of a knotty problem; but it seems to me that if care is not taken, the maintenance of a short-service army will be rendered an impossibility also, and then where shall we be?

On the principle of the "stitch in time," it is as well to face the present difficulty manfully and not to procrastinate until further mischief is wrought, for depend upon it, the longer the day of reckoning is deferred, the more formidable will be our task when matters have to be put straight, as sooner or later must be the case.

To contend, as some are never tired of doing, that the present system has been productive of the most wonderful results is the height of all folly; it only has the effect of blinding the public into the belief that there is nothing they can do to increase the smooth working of the military machine, when all the time their assistance is urgently needed to complete the details of the organization, and provide us with the army which that organization has been built up for the purpose of supplying, but which hitherto it has unquestionably failed to supply.

The idea of systematic—unmixed—short service in the British army arose from the magnificent results which it had shown during the Franco-Prussian war of 1870-71.

The chiefs of the English Military Organization had just awoke to the fact that they had no reserve to fall back upon, and that one day of such slaughter as took place at Worth or Gravelotte would leave gaps in the only army corps England could put in the field, which it would be difficult, if not impossible, to fill. They had seen a whole nation of trained and disciplined men spring up, fully organized and equipped, and group themselves without hitch or friction around their varied centres, move to all intents and purposes as one machine. As one body passed to the front, its place was supplied from efficient reserves, until over a million soldiers were on their way marching in an everincreasing stream rapidly, silently, relentlessly to avenge the honour of their fatherland.

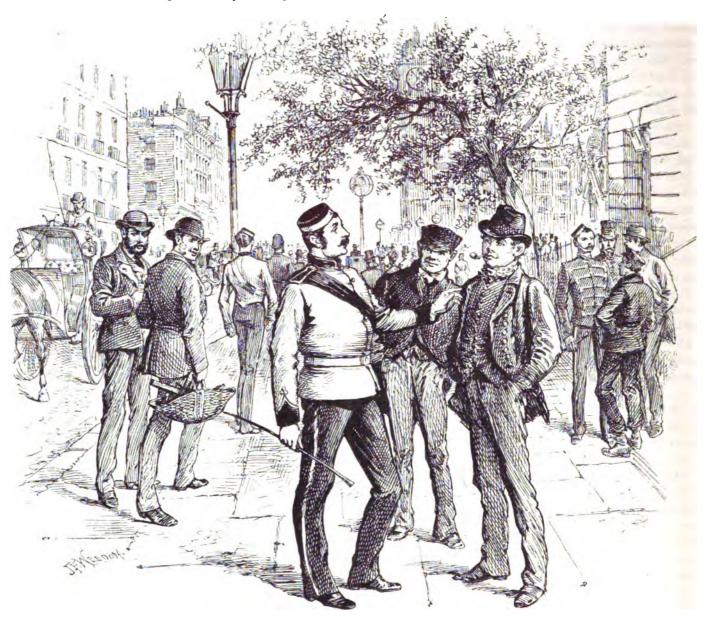
Throughout a war involving life or death to Germany, the system stood the fearful strain, and, without a single breakdown, in six months, brought the people which had held the arbitrament of European affairs for a quarter of a century, helplessly and hopelessly to Von Moltke's feet.

The result simply made Europe stand aghast, with mingled admiration, relief and fear, lest the conqueror should use his awful power for illegitimate ends. England became nervous. She compared her own showy, but unsupported army with the marvellous cumulative force of Germany's sustained efforts, and, grasping at the results without calculation of the means employed to produce

them, immediately started a short-service system of her own. Despite the occasional roseate hues of official doctrinaries, it is obvious to all unprejudiced persons who have adequate knowledge of the subject, that the English imitation of the German system has failed in every item of the programme it proposed to carry out. It has failed principally because, though every device has been had recourse to to secure soldiers, nothing, absolutely nothing, has been

siderable and unreliable. The 15,000 men annually drafted from the ranks find themselves practically ruined by their spell of soldiering, and are gradually forming a nucleus of impoverished, discontented citizens, from whom some day the spark of revolution may spread into a flame which would involve England in a mighty conflagration, and destroy for ever her position and her power.

With these disadvantages in the present and dangers in



Touting for Recruits at George Street, Westminster.

done to provide for those men when their term of colour service has expired. The State has been satisfied to throw them back into civil life to act as deterrents to recruitings, to point to their own cases as exemplifying the evils of army service.

And what is the result?

The men in the ranks are only men in name. Their numbers are insufficient. The reserve aimed at is incon-

the future before our eyes, let us examine into some of the reasons why our feeble copy has so utterly failed to secure the success enjoyed by its great model.

In the first place, there is this difference between England and Germany. The latter has, by the law of conscription, the choice of the brightest and the best of its manhood. The greater the mental and physical perfection of a German youth, the more absolutely certain it is that he will pass under the dominion of the drill sergeant and serve his country in arms. It is the first and greatest of his duties, and during his period of service he is looked up to as the representative of his countrymen inthe most sacred of their obligations.

Compare this phase of the question with the state of things in England. There is no conscription. Military service is a matter of free contract between the soldier and the State. In a rich commercial nation like ours, the arts of peace have so thorough a supremacy, that military matters are regarded during peace with a large amount of indifference, mingled with a good deal of impatience at the big figures representing the cost of armed forces, which are looked upon as more or less extraneous to the habitual life of the country.

Moreover, the individual members of our community are so imbued with the principles of personal freedom, that the discipline and self-abnegation of a soldier's life are instinctively distasteful to them. There is so great a struggle for wealth and position, and the prizes offered in the professional, mercantile, and trading world, are so many and so large, that all the best talent of the country is enlisted in the more exciting battle of civilian life. Consequently, the only material at the disposal of the military authorities may be divided into two classes, viz. those who by some want either of physical or mental energy are left behind in the struggle for existence, and those restless spirits who take to soldiering because their flighty dispositions render them incapable of the calm concentration necessary for civil success. It is therefore either dire necessity or the infirmity of purpose of youthful vagaries that induces Englishmen in these days to don the uniform of the sovereign.

Having thus compared the material of the two armies, let us consider the treatment of that material, first in the social and secondly in the moral sense.

The German youth, as his term of service comes round, leaves his town or village with the good wishes of all his friends and acquaintances. He sees around him those who, called out three years before, have just returned, bronzed and matured by military training and active exercise, looking back with pride, that during their soldier life, they have kept the bonds of comradeship unsevered and the good name of their little community unsullied and unstained. His future officers are already known to him by name and reputation, and he is aware that on entering the barrack yard, he will meet the kindly faces and warm hand-shake of those who started from his home on the same mission during the two previous years, and who are ready to be his friends, guardians, and sponsors, until they shall be released, and his experience shall enable him to pass on his legacy of kindness to his successors in their turn.

Full of pride and determination to uphold the honour of the regiment, in which probably his father served, and whose achievements have been the constant subject of the talk round the village-inn fire and the family hearth, he sets out with everything in his favour, and the feeling that he is no pariah, but only submitting to the universal lot.

He has looked forward to it from his youth, all the family arrangements have been made with reference to it and if he has any of the spirit of manhood in him, there is a considerable amount of pleasure in the anticipation of a change of surroundings and the glamour of the soldier's profession incidental to the feelings of a military nation.

How different it is in England! Let any person go down to Westminster and watch the recruiting-sergeant at work, touting for the residuum from which the British soldier is drawn. Watch him with his jaunty step, but keen and anxious eye. Every now and then he will say a word or two to a passer-by. "Now, my lad, do you want to join the service?"

To whom among the constant stream of passing humanity is the question put?

Not to the brisk, sturdy workman going about his business, nor to any one who, from his demeanour, appears to have any object or interest in life. They are not the sergeant's prey. It is the shiftless, hesitating walk, the vacant eye, the purposeless expression, and the indications of want that are the attributes of his customers. Such are the fish that come to his net. And none are rejected.

Of such mainly is the British army composed, and hence the military service is from a second point of view distasteful to the respectable majority of the nation. I have described the average outset of the German recruit. His English equivalent is generally either too lonely and friendless for any one to care much what has become of him; or, if he has any connections, and is of the lowest class, as usual, he is so much dead weight off the shoulders of an impoverished family. He would not have enlisted unless he had been desperately "out of collar," and so, until his time of furlough comes, or he reappears surreptitiously with the deserter's brand upon him, he drops out of mind. If he belongs to a higher class, there has invariably been something uncanny to drive him from his home. He has, perhaps, enlisted in a false name, as many do, and this probably explains the multitude of unclaimed soldiers' balances which are annually gazetted. His name is either mentioned with bated breath, or left unsaid in the family circle, and even if the poor lad has done nothing wrong, his so-called degrading step will bring a blush to the father's cheek, and a tear to the mother's eye, when he is spoken of or thought about.

The difference of the auspices under which the two youths enter their country's service, is kept up throughout their military career. The German has privileges specially granted as a mark of honour to his class. He can go at reduced prices to all places of amusement. His side-arms are an evidence of superiority over the civilian. He has precedence and indulgence on all sides, because of

his uniform. He sees, as I have seen, the son of his general even, meekly wearing the private's simple coat as an "avantageur," and shouldering his rifle among the men whom he will one day command, and who, while receiving honour from his presence, in no way degrade him in the eyes of any of his countrymen.

In England, on the contrary, the soldier is at a disadvantage on all sides. In spite of the increased tolerance which the volunteer movement has given him, he is looked upon generally with distrust and disdain. His side-arms are denied him, for fear he should use them badly. His uniform subjects him to insult and contumely, in places where the humblest of his respectably-, and sometimes anything but respectably-, dressed fellow citizens are treated No "respectable" with consideration and deference. person cares to be seen in the company of a "common soldier." If he comes of an even moderately well-to-do family, he cannot join them socially, for fear of the disgrace and contamination of his inferior station. Nay, even if by pluck, good conduct, and luck, he raises himself to commissioned grade, and gives the noblest example of sustained and earnest effort in the pursuit of his calling, there is a certain slur upon his dignity, for he is spoken of, even by soldiers themselves, as only a "Ranker."

So much for the social aspect of the two services. The moral aspect is even more important as affecting the interests and welfare of the men, and there is just as great a contrast.

The young German, as soon as he gets his uniform and is duly domiciled in his barrack-room, finds himself the subject of a perfect moral, military, and industrial training. He has no option in the matter. The State, while using him freely for its own requirements, has a large idea of its duties and ultimate interests. He is consigned to the charge of an older and steady soldier who is responsible for his general behaviour, and in whose company and under whose guidance alone he is at the outset of his career allowed to move abroad.

Coming in most cases from old-world towns, or country villages, the temptations of garrison life are carefully warded off his inexperienced head. He simply is not allowed to "go wrong," for in order to do so, he has not only to elude the vigilance of his official superiors, but the more intimate surveillance of his soldier guardian. He is worked hard and has no time for idle thoughts. His average duties are about nine hours a day. The time is subdivided in such a manner that there is a constant change of occupation under the personal and immediate supervision of his captain and lieutenants-When he is not at drill or lecture, he is handed over to the military tradesmen and artificers, taught to mend his clothes, to make himself useful in every requirement of military life, to cook, to trench, and to work at some trade, which acquirements, while rendering him a more serviceable item in his regiment, may benefit his future career.

As his self-control and experience are recognized, he is freed from the tutelage of his guardian, and in his turn has juniors put under his protecting wing to learn the ins and outs of garrison life. His education is rarely defective, as his country has long recognized the importance of compulsory schooling; but if it is, the defect is promptly remedied, and he is encouraged to take up some study which will be of service to himself and the country. For thirty-four months this training goes on almost without intermission, until he is sent back to the home, a finished soldier, thoroughly well up in all the duties of his station, with morals, at any rate, not deteriorated by his military career, strengthened and braced in body and mind, and imbued with habits of discipline and, above all, industry.

The English soldier, on the other hand, is treated with no such paternal care. He has, it is true, a pretty rough time of it for some few months, and until his recruit training is completed, has perhaps five or six hours work a day. Recreation rooms are provided for him in most garrisons, but the restrictions are too great to suit his ideas of freedom from duty, and he wanders, unprotected, into his congenial slums. Only the lower class of houses of call welcome him as a rule, and, beyond the chaplain's weekly sermon, there is no guiding hand to keep him out of mischief. When his recruit drills are over, he becomes a comparatively idle man. For many hours each day, on which he is off guard, he has nothing to do but to "loaf." He duly hates his tour of guardmounting, and supplements his leisure with a fair amount of malingering. With the fear of the guardroom and the cells before his eyes, he either keeps out of mischief, or gets into it, just in proportion as fear or inclination may predominate. Recruited from anywhere, he finds as a rule no friends in the regiment, and no counsellors to guide him in his choice of them. He has opportunities of improvement, but, as he is no better than the average of humanity, and from the fact of his being a soldier, generally a little bit worse, he does what he is obliged to do and no more. This goes on from year to year, whether his station be at home or abroad, until, when his time -long looked for-of discharge arrives, he is turned out upon the world again, with enough money in his pocket to suggest unlimited drink, with no prospect of the piquet or the provost prison behind it. The country has had the best years of his life. During that period, the regimental authorities have insisted on his doing a certain amount of military duty, and learning, if wanting in those accomplishments, to read and write. Moreover, they have placed at his disposal many chances of self improvement. But they have not systematically trained him to be a good citizen on leaving the colours.

In fact, they have thought of themselves only, and beyond making the man very moderately efficient in the routine of his duty, have left him to himself to contract habits of idleness and profligacy if so inclined.

Regimental officers will frankly admit all this, but their

answer is, "There are few inducements indeed to tempt men into the ranks, and one of the principal ones is that the life is usually an easy one with plenty of leisure to a man of good character. If a man knows that besides the many other disadvantages of soldiering, hard and persistent work is to be his lot, the attenuated ranks will be thinner still and composed even of a lower class than now."

My military friends are right. It is the country's fault, which sacrifices to present expediency, the man's true interest as well as its own. To complete the subject before us, a few words are perhaps advisable as to the

and so things balance themselves from year to year. The man has only been away about 2½ years, and then not far away. As his going was looked forward to, so his return is as far as possible provided for. He has been improved in every way by his training, and even if his handicraft be such as he could not practise in the barracks, he has probably learned something else, or is not too rusty at his own to retake his place in the ranks of labour.

The English Reserve man, be it remembered, has been from six to eight years away, probably a good portion of the time abroad. His training has not fitted him for any position in civil life. His place, supposing him to have



GERMAN OFFICERS AND SOLDIERS AT RECREATION.

lasting and permanent consequences of military service, from the German and English points of view respectively.

The German Reserve man, returning to his home, finds in most instances, little difficulty in settling down into civil life again. In the first place, to have finished his army service is in itself a recommendation. The employer knows that except when the Reserves are embodied for a short period, or under great national pressure, his workman's time will be at his disposal.

The annual draft of the conscription is simply replaced by approximately the same number of men coming back, had any, has long since been filled up in the social world. Boys have grown to men since he left his native town or village. The years wasted in the ranks have put him at the tail end of the procession. He is twenty-six or twenty-eight years of age. He has, generally speaking, no trade. His habits have become fairly set, and they are those of an aimless idler. He comes into a social system where the very fact of his having been a soldier is against him. He is looked upon, more or less, as a vagabond. The testimonials of his officers are regarded with suspicion. He has to compete, wheresoever he turns, with

men who have been thoroughly trained to the work he seeks, and whose personal character can be ascertained at once from former civilian employers. The few pounds in his pocket soon dwindle away, even if, as is rarely the case, they be carefully husbanded, and in the majority of cases he sinks to the lowest depths of misery, cursing the day that he ever entered the Queen's service, and thoroughly embittered against that system of law and order, to uphold which he has given thanklessly the best years of his early manhood.

He is an example to the youths with whom he associates not to do as he has done—to shirk the army as an unprofitable calling. And thus, instead of acting as a good recruiting agent, he, by inveighing against the army and everything connected with soldiers, deters others from entering the ranks.

I have shown, I think, that the English Reserve man has to encounter a widespread prejudice against soldiers; a prejudice which the State by its action, or rather inaction, does much to encourage. Of such prejudice the German knows nothing. It is this prejudice which so much handicaps the discharged soldier, and robs him of his chances of entering upon a career of honest industry. And it is this prejudice which the State ought to, and must endeavour to, remove by all available and legitimate means if voluntary service is to continue to be the principle by which the ranks of the army are to be filled.

Our army is kept up by the good will of the population. We are a commercial people, *i.e.* essentially business-like, and, being business-like, professedly practical. Well, let us be practical.

Mr. Brown, before mentioned, knows that he is a power in the land. He is a merchant prince, his name is known in commercial cities all over the world. His merchandise is shipped daily to all quarters of the globe. A big war would mean ruin, perhaps, to him; but he is satisfied to place implicit confidence in the wisdom of the high officials to whose care the efficiency of the defensive services is entrusted.

Does Mr. Brown ever reflect as to the consequences which his apathy with regard to the army and navy might produce? Does he ever think of the past, and recall the circumstances under which India and other possessions have been won? Does he ever consider what the loss of any of those dependencies would mean to the mother country? If he knew that a raid was likely to be made on his manufactory or country house, what would he do? He would call in the aid of the police. But suppose a raid was made on our commerce; suppose a war was declared with some European power, and our trade was crippled, how would the house of Brown, Robinson, and Co. stand then?

As I sought to show in a pamphlet I published some time ago, The Truth about the Army, the army and navy are to the empire what the police are to the community at large—its guardians, enrolled for the protection of life and property. And the large sums voted annually as estimates are in reality nothing more nor less than premiums of insurance.

Let Mr. Brown remember this, and let him and others situated as he is, ask themselves whether there is not something they can do in a substantial way to promote the welfare of the services, the existence of which enables them to carry on the commerce from which their wealth has been obtained.

Mr. Brown says he pays his taxes. True, he does, so do others not so favourably situated.

"Yes, but," he may say, "I pay more than the rector of my parish."

True again.

Mr. Brown forgets that his merchandise requires to be protected. He has more at stake than the Rev. J. Smith, and he is more highly taxed accordingly.

"But having paid my taxes," he may go on to argue, "I surely have done enough?"

I answer, "No." Mr. Brown forgets that when the question of conscription is raised the answer always is, "We are a commercial people, and we could not stand the strain."

Then we must adopt the only other alternative. We must popularise the army. The British Army, for the many varied duties imposed upon it, is a miserably small one—quite inadequate to the requirements of the empire. But it is very expensive, it costs us £16,000,000 a year, and no war minister in the present state of apathy would care to risk his reputation by asking for any greatly-increased estimates. So we have to do the best we can with what we have got, and must strive to make our coat according to the amount of our cloth, painfully limited though the amount may be.

"All this is beside the question, though," Mr. Brown may remark. "I do not see what it has to do with me."

It has more to do with you, sir, than you evidently suppose. You say you pay your taxes, and you pay liberally. Very good. You object to conscription, because you are of opinion that the nation could and would not stand it; it would interfere with commerce, and be in every way a hardship on the youth of the country. You do not favour the idea of increased taxation. You recognize that the country is becoming richer, more thickly populated, and more enterprising—in a commercial sense—every year, and you admit the necessity which exists for us to keep up a standing army. But you do not see that you individually have anything to do with the welfare of that army beyond paying your taxes, and you do not see how you can help to popularise the service.

Now, I wish to show you where you are wrong. I have remarked above that the army is kept up by the good will of the people. Whatever the reasons may be which induce young men to join the ranks of the army, on becoming soldiers they enter the service of their country. In doing

this they make certain sacrifices in the interests of the State. If they did not come forward in sufficient numbers whether we liked it or not, we should have to submit to conscription. Service being now purely voluntary, it becomes imperative that in order to render the army popular, it should offer attractions to enable it to compete, on something like fair terms, with the industries of civil life. Every expedient has been had recourse to in order to attract good men to the colours. The pay has been increased, the term of service has been reduced, the position of the non-commissioned ranks has been improved, and deferred pay has been given. And yet, despite all assurances of War Office officials to the contrary, the majority of those who offer themselves for service are boys, not men. Many of these boys pass the medical examination, and are enrolled for the simple reason that the supply not being equal to the demand, the military authorities are obliged to take whatever material they can. They would, of course, prefer men of from twenty to twenty-four years of age, but men arrived at that time of life, as a rule, have managed to provide for themselves somehow; and though a few may, from distaste for civilian life, want, or other causes, change the black coat for the scarlet or blue tunic, the recruit of to-day, generally speaking, like the young turkey which is brought forward for the Christmas market, wants to be fattened and developed before he can fairly be considered fit for show.

Only the other day I was shown a report of a medical officer who had been inspecting the men of a battalion first for service. The battalion consisted of, in round numbers, 700 men. Of this number, 370 were pronounced to be unfit for service on account of their immaturity. "They are good lads enough, in most cases," my friend assured me; "but they ought never to have been passed into the service. It will take two years for many of them to develop the necessary physique, and some fifty or sixty never will be fit for anything."

Such testimony to the disadvantages of the existing system is indisputable. I adduce it in no carping spirit, but with the view of explaining to the practical taxpayer that faults do exist in our military system, despite all recent military legislation and the encouraging assurances of those in office in Pall Mall, and that it is to his interest that facts should be laid bare, and that something should be done to remedy undoubted defects.

It will be conceded, I presume, by all classes, that the army is maintained for one purpose, and one purpose only, viz. that of fighting the nation's battles and upholding the honour of our empire. In order to enable it to carry out the duties assigned to it as a defensive organization, it is essential that its ranks should be at all times filled with men, not only dressed as soldiers, but fitted in every way to bear arms.

We have it on medical testimony, that there are in the ranks in one battalion alone some 300 or 400 men who

are physically unfit to perform any but the most ordinary duties attaching to the calling of arms. These youthful soldiers, though rated as men in all official returns, are, to all intents and purposes, boys—boys so wanting stamina as to be physically unfit to proceed on foreign—say nothing of active service.

But these boys receive each of them a man's wage. My medical friend asserts that it will be two years before some of these lads, rated and paid as men, will have developed sufficient physique to justify them being sent abroad.

In the meantime the country is called upon to clothe, feed, house, and pay them. My friend refers only to one battalion; it is reasonable to suppose that in every battalion on home service the same state of things exists to a greater or less extent.

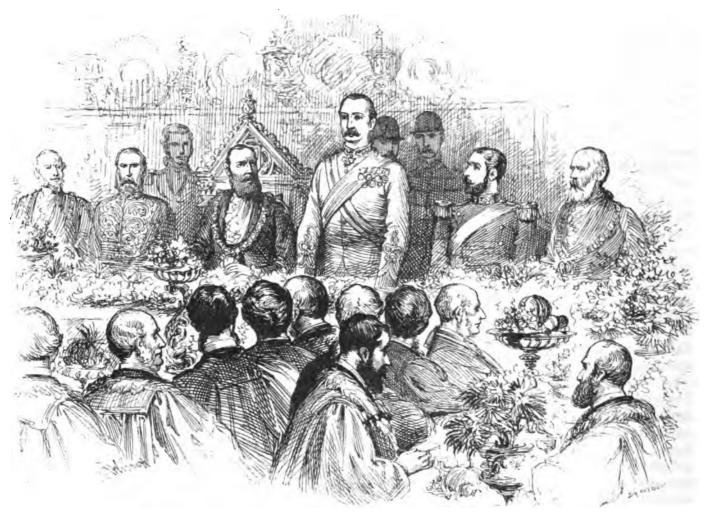
I ask is this a satisfactory condition of affairs? Can the British taxpayer really be satisfied whilst his money is spent on such material? Is it fair to the men themselves that they should be required to perform duties which their very immaturity and want of physical power render it impossible for them to discharge? Our friend Mr. Brown will not employ a Reserve man because he fears the State might demand the man's services at a time when he could ill be spared. Mr. Brown is evidently a shrewd man of business. I ask Mr. Brown, therefore, whether he would consider that he was promoting the true interests of his firm, if he took into his employ a lot of young lads, incapable on account of physical disqualifications from bearing the slightest strain, and allowed those boys to be rated and paid as able-bodied men? But suppose the supply of labour was so small that these lads were obliged to be taken from very necessity, because the able-bodied men were being allowed to drift away to the Colonies, to follow more lucrative pursuits.

It strikes me if Mr. Brown did such a thing the honoured name of Brown, Robinson, and Co. would very soon find itself included among those either bankrupt or in liquidation. Before the crash came, methinks, Messrs. Brown and Co. would bring to bear all the pressure they could to represent, through the medium of the press, the dangers the country was incurring by such a lamentable condition of things, and would invoke the assistance of all enlightened taxpayers to put a stop to an evil which could not fail to land the nation in irretrievable ruin. In other words, they would do what the practical soldiers in the army have been doing for some time past, and for doing which they have been pronounced "drones and dullards," "club grumblers," by those who, for the purpose of self-aggrandisement, have persistently upheld the present system.

The policy which Mr. Brown, with his practical business knowledge, would pronounce suicidal the State has adopted of late years. And ministers, officials, and some few political soldiers, and last, but not least, the *Times*, would have us believe that it is a wise and good policy, beneficial alike to the army and the State.

Mr. Brown has never perhaps looked at the matter from this stand-point. He is a practical man of business, but he has not been able, from ignorance or want of sympathy, to appreciate the arguments of the practical soldier, which argument is this—that it is as suicidal a policy for the nation to rate and pay boys as men, as it would be for Mr. Brown to do so in his commercial capacity as head of an eminent manufactory establishment.

Mr. Brown will, perhaps, see now, that the question of the state of the army does affect him more than he at first supposed; it affects him as a taxpayer, and from the taxWhilst you go to your City dinner and make merry; whilst you give the after-dinner speakers, whom you invite to address you, thoroughly to understand that you only want them to tell you pretty things, a condition which they in many cases are only too ready to accept; whilst you protest against the idea of universal service, and object to any increase of naval and military expenditure; whilst you sneer at soldiers and turn away all discharged soldiers and Reserve men from your door, what in effect are you doing? You are simply plotting systematically, unconsciously of course, but nevertheless effectually, to bring



"THE ARMY IS IN A MOST EFFICIENT CONDITION."

payer's point of view he will agree with me, I think, having followed me so far, when I say that our present system must be defective to produce such unsatisfactory results as those brought to light by the medical inspection of the 1st Battalion Whitechapel Grenadiers.

And now, Mr. Brown, having induced you to follow me so far, and having made it clear to you, as I trust I have done, that there is something radically wrong in our military system, may I ask you to be logical.

You must see, sir, that matters cannot go on as they are at present.

about the ruin of your country and, with it, the ruin of the firm of which you are a respected representative.

Your line of reasoning is as follows, We don't want this, we won't have that, and we can't have the other.

But, really, you will have to do something. What shall that something be? The answer is not far to seek—Exercise common sense.

The present condition of the army can only be fitly described by one word, and that is, Deplorable. Its ranks are filled with undersized boys. Those boys serve their time with the colours, but are as soldiers perfectly useless

from want of physical capacity; on leaving the army, they are drafted into the ranks of the civil community as loafers and blackguards from sheer want of opportunity to develop into more useful members of society. And you, sir, with all your wealth and all your business experience, are so wanting in patriotism that you never trouble yourself to go into a question which affects you more closely perhaps than any other which comes before our Houses of Legislation.

But where is the remedy to be found for the present evil?

The remedy is this:-

Short service, as it has existed with us during the last thirteen years, has failed—utterly failed—notwithstanding the systematic attempts which have been made by officials at public banquets and by means of articles in the *Times* to disguise the fact.

The system has been a cruel tax on the finances of the empire, for it has filled the ranks of the army with striplings who have been paid as men, though quite incapable of doing men's work.

Quantity, not quality, has been the principle upon which the recruiting authorities, acting upon orders from head-quarters, have had to work.

And the public, blinded by the oratory of distinguished after-dinner speeches, and the inspired utterances of the leading journals, have been induced to imagine that the most splendid results were being obtained.

It is evident that the supporters of the system of boy soldiers have thought only of themselves and their own interests.

But a change must come.

The fact must be recognized once and for all, that under a system of voluntary enlistment, we in England cannot do what Germany does with conscription.

The army must be popularized.

And what are the best means of effecting this very desirable object?

In the first place, unmixed short service must cease. A certain number of men, who elect to do so, must be allowed to serve on for pension.

Secondly. Every endeavour must be made to raise the social status of the soldier through the influence of Parliament.

Thirdly. The Militia must be constituted a real Reserve, not what it is now, a sort of nobody's child. And every reserved soldier must, under certain conditions, be borne on the strength of some militia battalion for training.

Fourthly. The Volunteers generally, or some part of them, will have to be levelled up and entrusted, as far as possible, in war time, with the duties hitherto assigned to the Militia.

And, lastly, the State will require to draw up a complete scheme for ensuring for those who serve it in any military capacity a fair chance of obtaining a livelihood. It will have to see, in other words, that no man suffers unnecessarily from the fact of his being, or having been, a regular soldier, a militiaman, a yeomanry cavalryman, or a volunteer.

These, briefly stated, are the lines upon which future military administration and reform will have to run.

"Your scheme is comprehensive, but impracticable," methinks I hear my good friend Mr. Brown observe.

I am sorry if it is impracticable, for it is the only scheme which will save us from what I believe is inevitable, but which Mr. Brown thinks impracticable tooconscription.

Mr. Brown desires to avert or stave off the evil day when his sons will be compelled to bear arms. So do I. So does every thoughtful Englishman. If we can by any means overcome present difficulties, it is desirable that we should do so.

After many years' careful and attentive study of the subject, I am convinced that the plan I suggest is the only one which can possibly be worked under present conditions.

But one thing will be essential to success. It must be worked by large-minded men, soldiers in feeling as well as in name—i.e. men of a different calibre altogether to those who have been, for the last fifteen years, engaged in the by no means high-minded, honourable, or patriotic duty of throwing dust in the eyes of an ignorant and confiding public, for the purpose of securing their own advancement at the risk of the nation's safety.

My language, Mr. Brown, is rather severe, but it is perfectly true, as any soldier of any independence of spirit will tell you.

And now, sir, I have finished. In conclusion, let me beg of you to think over what I have said, and not in future to be led away as you have been by what interested officials, and distinguished soldiers, who are those officials' protégés, tell you when addressing you at Guildhall banquets and similar festive occasions. If you do disregard my warning, sir, a day will assuredly come when you will have to pay pretty heavily for your apathy, as the French did fifteen years ago.



# ANNIVERSARIES OF BRITISH VICTORIES.

## THE NAVAL VICTORY OFF CAPE ST. VINCENT.

EXIGENCIES of time and space absolutely preclude an account of this battle at all adequate to its merits and importance. All that can be given here is a very brief statement of the main features of the fight, and a relation of a few interesting incidents.

Early in the morning of the 14th of February, 1797, a British fleet of fifteen line-of-battle ships, under Admiral Sir John Jervis, sighted the Spanish fleet of twentyseven ships, under Don Josef de Cordova, sailing in an irregular line towards Cadiz. The British fleet consisted of two ships of 100 guns, two of 98, two of 90, eight of 74, and one of 64; thus carrying altogether 1,232 guns. The Spaniards had a four-decker of 130 guns, six ships of 112, one of 84, and nineteen of 74; carrying altogether 2,292 guns. But, though the enemy had nearly double the number of ships and guns, and rather more than double the number of men, the superiority of the British in seamanship and gunnery more than compensated for their numerical inferiority. And further, though the Spaniards showed a high degree of personal courage, they could not have the confidence inspired by continued success which actuated such men as Jervis, Nelson, Collingwood, Troubridge, Saun.arez, Calder, and other heroes of many fights and almost as many victories.

The morning of the 14th was very hazy, and this delayed the commencement of the encounter till mid-day. In no other action was the superiority of the British admirals in manœuvring, and of the British captains in handling their ships, displayed to greater advantage. At the close of the battle, four Spanish ships remained in our possession, and the rest were glad to escape capture or destruction. The loss of the Spaniards could not be ascertained, but as in the four captured ships there were 261 killed and 343 wounded, the total loss must have

been very great. The British had only 78 killed and 227 seriously wounded. We are expressly told that men with slight wounds were not included in the lists of casualties.

A detachment of the 29th regiment was serving on board the *Blenheim* as Marines, and a detachment of the 69th on board the *Captain*, which bore the pennant of Commodore Nelson, and both had a fair proportion of killed and wounded. Nelson's ship had the hardest fighting, and lost eighty killed and wounded. After being so damaged as to be unable to manœuvre, she boarded and captured the *San Nicholas* of eighty-four guns, and her crew went on from that ship to board and capture the *San Josef* of 112 guns. What Nelson thought of the services of the 69th in boarding the former may best be told in his own words:—

"The soldiers of the 69th, with an alacrity which will ever do them credit, with Lieutenant Pierson of the same regiment, were among the foremost on this service. The first man who jumped in the enemy's mizen chains was Captain Berry, late my First Lieutenant. He was supported from our spritsail-yard, and a soldier of the 69th regiment, having broken the upper quarter-gallery window, jumped in, followed by myself and others as fast as possible. I found the cabin-doors fastened, and the Spanish officers fired their pistols at us through the windows, but having broken the doors, the soldiers fired, and the Spanish Brigadier (Commodore) fell as retiring to the upper deck."

Nelson included the 69th among his "old Agamemnons," in remembrance of their service with him at Corsica in 1793, when he commanded that ship.

The 29th and 62th may well be proud of having contributed by their detachments, to gain this glorious victory.



#### EDITORIAL.

#### OUR GUN ARMAMENT.

I WILL now proceed to state the position in which Colonel Eardley-Wilmot placed the newly-organised Royal Gun Factory, before the results of his labours were seized upon in furtherance of a gigantic scheme for once more placing the country's gun armament in the hands of particular private designers with enormous contract interests at work in a particular direction. I will proceed to show, step by step, how disastrously the scheme operated against this country, how other gun armament inventors were systematically burked to maintain particular interests supported by officialism at the War Office, and how the

whole scheme ended in once more landing Great Britain in disgrace and failure, after wastefully spending nearly £4,000,000. I will so astound my readers, that they will scarcely credit the words I write. They will be almost disinclined to believe the tale. But I will prove it to be true, to the minutest details.

Colonel Eardley-Wilmot, as soon as he had ready the necessary furnaces, all the engines, boilers, shafting and other running gear, and all the powerful machinery in position, had installed the foreman and engaged the moulders, machinists and labourers, energetically commenced gun manufacture on behalf of the Government of his country, with the object of placing it in possession of

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a standard factory which should govern designs and control contract productions, both in price and workmanship. In other words, to place his country beyond the reach of being plundered by contractors, and to save the nation from disaster by failure of supply in critical times. I repeat that a more excellent object no British officer ever undertook to carry into execution.

Colonel Wilmot had for his directing staff, Major Arthur Vandeleur, R.A., Assistant-Superintendent; a young official of the Ordnance branch, for duties of a special nature, whose name need not be mentioned; Mr. William Keyte, Manager, an able and scientific engineer and a mathematician of high attainments, and Mr. Peter McKinlay as Proof Master. The latter had formerly been Sergeant-Instructor at the Royal Military Academy, afterwards in charge of the Astronomical Observatory at the Royal Artillery Repository. The attainments of this able man deserve mention. He was self-taught in electricity, photography, and in mathematical science. He was an artillerist of no mean order. He had obtained a high knowledge of astronomy by thorough hard mental work. He was a thoughtful Scotchman, with all the determination and perseverance of his admirable race. His whole mind was scientific.

For interior organisation, the Colonel had with him the young official who has not been named. He was the son of an Artillery officer who had held a military post of great responsibility at the Royal Military Academy for many years, and who had been a fellow-worker with the gallant Colonel at the Royal Military Academy in carrying out the reorganisation there from the old Spartan system of hard living and punishments, to better interior economy and governing by example and advice tempered by judicious discipline. This young officer had been born amongst guns, drill, and scientific teaching. He had been brought up and educated within the precincts of the Royal Military Academy, and had largely shared in the studies of the Gentlemen Cadets, with whom he had been in constant companionship. The foremen whom Colonel Wilmot obtained were all men of high mechanical skill and training. This was the first directing staff of the Royal Gun Factory. Now, let us see what these men did for their country.

From early morning till late at night, there was no cessation of their labours, no diminution of that energy which, as Englishmen, formed a portion of their constitution.

It would too much extend this recital, to go into the details of the daily work of every member of the Colonel's staff. It will be sufficient to give the final results of energetic labours by earnest-minded men, who were honestly striving to place their country in a favourable position in relation to its "gun armament."

The first guns, 32 pounders, did not turn out well. In the first place, the metal was found too brittle; the secret of the proper admixtures of pig and other iron had not been obtained. In the second, the exact moment for running into the moulds had not been correctly ascertained. The metal was somewhat scorched. The first productions burst on proof. Yet, out of experiments consequent upon these bursts, came investigation that procured practical and satisfactory results, and Colonel Wilmot eventually produced cast-iron guns of equal strength and stability to those previously supplied by contract. His young Aide, the son of the Artillery officer at the Royal Military Academy, well knew that his gallant chief wanted to gain other experience than that of mere gun production. This young official was aware that the

Colonel desired a complete interior organisation upon economical lines, such, indeed, as would enable him to prove that he could turn out guns in every way equal to those of contract, and at much less cost; to show, in fact, that the country could save hundreds of thousands of pounds sterling per annum, by a satisfactory manufacture of its munitions of war in its own factories. Up to this time, no effort whatever had been made to show the cost of production in any of the establishments of the Royal Arsenal. The opportunity of doing so had now come in earnest. It was taken advantage of to the fullest. The young official set to work with a will. With immense labour, he established a complete system of time, piece, and cost accounts for the whole factory; and eventually produced the cost of the guns and other productions turned out in the department, to the utter surprise of the other departments in the Royal Arsenal, which had to follow suit, as soon as this resolute young official succeeded in obtaining sanction from the War Office for all that he had done. He obtained this sanction in the end, because it was but too obvious he had been working in a true direction. These Royal Gun Factory accounts became the model upon which all the manufacturing accounts of the Royal Arsenal were afterwards framed, and well they have stood the test of time. They have been often attacked with a virulence only instigated by jealousy. They have withstood many a fierce assailment. They have saved the Royal Gun Factory in many a time of difficulty. I trust they will continue to do so. The task undertaken and carried out with unshaken persistency was a heavy one.

The reward for all the hard work it entailed, was the positive proof that the Royal Gun Factory could make as good guns as any produced by contract, and at a far less cost to the nation, notwithstanding the enormous official expenses consequent upon the establishment of a system of accounts suitable for an elaborate War-Office audit. At one period only, have these accounts been found not to be true. This was when the young official who organised and brought them to fair perfection, had nothing to do with them. They were taken out of his hands for certain reasons when Colonel Wilmot was dismissed and Sir William Armstrong was appointed Engineer for rifled ordnance as nominal head of the Royal Gun Factory, with Mr. Anderson as its actual chief. I will relate further on all about this want of correctness in the Royal Gun Factory accounts, and how it caused the entire situation of affairs in relation to "our gun armament," to become completely changed. I will also show, stage by stage, how a wrongful act, committed by a high public functionary at the War Office, from personal enmity on the one hand and private motives to favour particular persons on the other, has led in the end to the present dangerous condition of "our gun armament."

Concurrently with the organisation and establishment of a proper system of cost and other accounts for the new manufacturing department, Colonel Eardley-Wilmot, Mr. Keyte, and Mr. McKinlay carried on experiments. Mr. McKinlay established a system of firing the guns on proof, by a voltaic current with an arc produced by thin iron wire in the cup of the firing tube, which arc, coming to a white heat by the force of the current, exploded the tube in the vent. Mr., now Sir F. Abel, afterwards introduced the magnetic current, for the generation of a spark through the slight separation of the conducting wires.

Mr. McKinlay also introduced photography into the investigation and record of all defects in gun-making and in materials. He introduced the process of ascertaining damage to the bores of guns, by means of the pressure of softened gutta-percha, and then photographing the results for the spread of information. In every direction where photography could be made available for investigation and record of results, Mr. McKinlay rendered it so. We see, at the present time, the results of this excellent officer's work, in the Royal Arsenal Chemical Department's extensive photographic establishment. Mr. McKinlay established a museum of the results of trials of every class of material suitable to gun manufacture, or to their appliances. The pieces of metal experimented with, were carefully kept and the results of their trial recorded for investigation and guidance. Colonel Wilmot procured a testing machine for obtaining the tensile and torsion strength of metals. Mr. McKinlay had charge of the machine and of the records of all the results obtained by means of this valuable aid to investigation. Other work and duties of a highly interesting and important character to gun-making, this scientific and hardheaded public servant undertook and carried out successfully, under Colonel Wilmot's general direction.

Mr. Keyte, the manager, in addition to designing furnaces and machinery and placing them in position, established the first drawing office with an efficient staff of mechanical draughtsmen, in which the Colonel took the deepest interest. Major Vandeleur incessantly conducted important experiments which the Colonel was continually devising for the improvement of processes of manufacture.

The Colonel's mind was ever at work. He received in the most cordial manner, inventors in gun-making who sought him out in furtherance of their objects. Lynal Thomas, Westley-Richards, Mr., now Sir Joseph Whitworth, Cavalli Woliendorf, Bashley-Britten, and othersall came to him, and all were encouraged to persevere in their efforts. Every assistance the Colonel could render, by advice or in any other way, he gave them freely. He often asked for their opinions. Frequently he experimented with these inventors' ideas, but never behind their back, always in their presence, that they might see for themselves the results of their own ideas. He showed them his reports upon the experiments, so that none of his doings might be called cut-throat or underhanded. How could they help admiring this man who worked with them in their country's service, not against them? He quickly perceived that several of these inventors were well abreast of the times, some ahead. He too, perceived that which must come in gun production. He thoroughly investigated the results of experiments with smooth-bore guns and round shot against armour-plating of ships, as shown by trials against plating similar to that on ships built by the late Emperor of the French, who was even then going ahead of this country in armour-clad vessels for his navy. The Colonel quite agreed with several gun inventors, that the era of rifled ordnance was fast approaching. He went on experimenting. He knew that cast-iron guns would soon become weapons of the past. He communicated with Mr., now Sir Henry Bessemer, and procured some of his steel that was then attracting so much attention all over the world. He experimented largely with this and other steel of various characters which he thought would probably replace the cast iron. He had but little faith in any other gun but that which represented a solid

structure to the action of fired gunpowder. Of that, the present writer had a notable instance, when he took to Colonel Wilmot the plan of a breech-loading cannon he had devised. The Colonel pointed out how and where exploding gunpowder would search the breech arrangement. remarks stand good at the present hour. The same difficulties are present with the action of fired gunpowder in breechloading ordnance of heavy calibre, as those pointed out to the writer some seven-and-twenty years ago. The Colonel obtained from Paris, the plans of the gun-metal rifled field ordnance introduced by the Emperor of the French, some time before the Franco-Austrian war. It does not matter how Colonel Wilmot procured these plans. He did obtain them, and the writer of this statement saw and examined them carefully. A modification of the rifling afterwards became the Woolwich system. Colonel Wilmot reduced the French measurements to English, and made a gunmetal field-piece for experiment. He saw at once that gun-metal would not do for rifled ordnance. He continued his experiments with steel. He placed himself in personal communication with Mr. Bessemer. The two scientific men earnestly set to work with one object, namely, to produce a first-class gun-steel which would meet every requirement of rifled-cannon of the heaviest calibre. The Colonel sought out other makers of steel and asked them to assist him in his experiments for the production of gun-steel of the requisite quality. By every means in his power, Colonel Eardley-Wilmot sought for the results of firstclass steel production, so that he might commence the manufacture of rifled ordnance which could be absolutely depended upon, and which would thus place Great Britain foremost in gun production amongst surrounding nations. This splendid Artillery officer and honest-minded man would have succeeded beyond the shadow of a doubt. Had he been permitted to remain at the head of the Royal Gun Factory, he would have placed this country, in respect to its "gun armament" where she is not now. He would have saved a wanton waste of nearly £4,000,000 of public money through a gigantic scheme. He would have asked for no reward beyond his country's approbation.

But Colonel Wilmot had an enemy—a powerful, implacable enemy. And it was the gallant officer's misfortune that this enemy was in a high position at the War Office. This enemy was Sir Benjamin Hawes, an Under-Secretary for War.

It is not necessary to state here, how this high official became Colonel Wilmot's enemy. He was the determined enemy of another Superintendent of a manufacturing establishment in the Royal Arsenal, and he sought for the opportunity, however slight, to remove them both. Colonel Wilmot and all his efforts on his country's behalf were sacrificed to this implacable Under-Secretary-of-State's personal ill-feeling, and all that has followed has come out of it. The other superintendent escaped the malicious intentions of the public functionary by the merest shave. Now, while this high official was so unfriendly to Colonel Wilmot, he was, owing to certain personal circumstances, very favourable to an outside inventor who, at a particular period which I will name in my next Editorial, was pushing his invention into public notice by means of the press, and by other means which shall be related later on.

I will, in my next, state how things were managed, so that the gun armament of the country should be handed over to Sir W. Armstrong and the contract firm with REVIEWS. 143

which he is connected—a transaction which brought about a terrible national loss and failure, with a consequent national injury. Colonel Wilmot was shamefully dismissed from his post. I will, in my relation of facts, leave it to my readers to judge whether a great organ of the London Press did not by its articles seriously lead public opinion in a direction that ultimately brought about a national waste of nearly £4,000,000. I will leave my readers to form an opinion as to whether this leading organ was "induced," and if so, how "induced," and for what object. I shall ask this newspaper whether it is going to repeat its former course of leading the nation in a wrong direction, by which the country will be again led into failure—into disaster and cruel waste of public money when it cannot possibly be spared—when the people are sorely distressed by depression of trade in every direction —when they require relief from taxation, instead of being still more burdened by increased waste through another failure of the national armament, owing to an improper advocacy of the suppression of the producing power of those Government manufacturing establishments which have done so much with the limited funds placed at their disposal by successive Administrations?

These departments have, notwithstanding everything said to the contrary, become establishments for the guidance of the nation in the production of its munitions of war. Amidst many difficulties, and everlastingly trammelled by the red tape of officialism, the Superintendents of these departments work on, assisted by an able and scientific staff, with the eyes of all the nation fixed upon their actions, and assailed by every contract interest exerted for their suppression, so that contractors may reap

all the consequent pecuniary advantages, to the national loss. The Royal Arsenal and Her Majesty's Royal Dockyards have been at the nation's back in many an hour of trial. They have saved the country many millions of public money, through the possession of an admirable power of production and an absolute control over the cost of armaments made by contract. I have more to say on this part of my subject.

#### MILITARY PREPARATORY COLLEGES.

THE establishment of a Preparatory College for military and civil service students at such a considerable distance from London as Milford Haven, in Pembrokeshire, is a new departure that should commend itself to all who desire to see the young men of England so trained that—whether destined to be soldiers, sailors, or civil servants of the country—the good effects of careful instruction, firm discipline and wholesome recreation, may be salient features in their respective careers.

Without entering into details, we cordially wish every success to the new venture, which under the control of so thoroughly experienced a commander as Colonel Graham, founder of the Oxford Military College, and starting as an established and already successful institution by the removal to Castle Hall of Captain Hill's Military Academy from Kensington, will not surprise us if it sends up men to the military and diplomatic services mentally and physically capable of obeying England's call to "do their duty."

EDITOR.

#### REVIEWS.

With Hicks Pasha in the Soudan; being an Account of the Senaar Campaign in 1883. By Colonel the Hon. T. COLBORNE, formerly of the 60th King's Royal Rifles and lately in the service of H.H. the Khedive. With a Frontispiece. London: Smith Elder and Co. 15 Waterloo Place. 1884.

COLONEL COLBORNE in this little book gives an excellent account of the Soudan Country, and shows himself to be both an observant and active officer—one who would make his mark in the Quartermaster-General's department. The volume throughout is dotted with interesting original communications which show Colonel Colborne to be a keen observer, a good raconteur and one possessed of a happy knack of describing currente colamo events of passing interest. The chapters on Camels en route to Berber, and Berber and its Inhabitants, are full of interest. The Battle of Marabia is well described, and the tactics and disposition of the army under General Hicks show him to have been a prudent and cautious general, and one much appreciated by those under his command. There is an old Greek saying, "An army of stags led by a lion is more formidable than an army of lions led by a stag;" and this aphorism is borne out by the remark of Colonel Colborne, who, in speaking of the battle of Marabia says, "The prompt formation of the

men was satisfactory in the extreme, and all were apparently ready for the fight. There is no question as to the good moral effect produced by the presence of a handful of British officers. The white helmet made itself conspicuous, and the fellah-soldier glanced now and again over his shoulder to this re-assuring rallying point."

The volume throughout is interesting, and the author has written in the chapter on "The capabilities of the country passed through by General Hicks," an account of the Fauna and Flora of the Soudan that will interest all sportsmen and lovers of natural history.

The Pictorial Press, Its Origin and Progress. By MASON JACKSON. London: Hurst and Blackett.

For many years the accomplished and esteemed Art Editor of the Illustrated London News, Mr. Mason Jackson, has held a prescriptive right to be regarded as the highest authority on the important subject which he has comprehensively and luminously treated in the handsomely illustrated volume before us. It has at the outset a special interest for the readers of this Magazine, one of the earliest woodcuts representing, rather quaintly according to existing notions, a naval engagement between Sir Francis Drake and the Spaniards. Battles and Sea

Fights abound, indeed, in the numerous illustrations, which will be found to fill many gaps in the history of England, so amply are commanding events depicted. To review this remarkable book adequately would be to touch upon most of the critical occurrences in the history of the past few centuries. But for this we regret we have not space. Coming to modern times, Mr. Mason Jackson reminds us that the Times and the Observer were formerly illustrated, and the pictorial proofs he presents certainly tend to indicate that we are within a measurable distance of a daily illustrated newspaper for England. Not the least valuable part is that which authoritatively traces the birth and rise of the first regular pictorial newspaper, the Illustrated London News, founded by the late Mr. Herbert Ingram, M.P. . The Pictorial Press of Mr. Mason Jackson should be regarded as the standard work upon Illustrated journalism.

In the Trades, the Tropics, and the Roaring Forties. By LADY BRASSEY. With 292 Illustrations engraved on wood by G. Pearson and T. Cooper, after Drawings by R. T. Pritchett. London: Longmans, Green, and Co.

THE readers of The Voyage in the Sunbeam, which attained such an enormous circulation, will not be disappointed in their expectations of Lady Brassey's new work. We may state in limine that it possesses all those sketches of men, manners, and countries she has visited, which has placed this accomplished lady among the first in rank of descriptive writers. As may be inferred from the title of the book, many places of great interest have been visited, some of which have never before been so fully described as the chapters on Jamaica show; while those that are met with in guide-books and elsewhere, Lady Brassey has contrived to invest with a charm and freshness of description peculiarly her own. The account of Madeira in the opening chapters will fully bear out this statement. The great charm of the book arises from the fact that Lady Brassey is a true lover of nature, and fairly revels in her descriptions of tropical scenery, plants, and every kind of animal that comes under her notice. Clouds, sunsets, and storms are described in a manner to satisfy the most exigeant of critics; and her word-painting of chiaroscuro would, we feel sure, be pronounced by Mr. Ruskin as Turneresque. If space permitted—as readers of the book will find—the truth of our remarks could easily be illustrated. In one of the chapters about Trinidad occurs the following description of a night there: "It was a heavenly night. It almost seemed as if the stars, tired with flirting with the fairies on shore, had deserted the grassy slopes and fragrant groves to frolic with the mermaids, so bright was the surface of the sea with the floating lights of the Medusæ and Noctilucæ.

There is a capital account of the various ants known in

Trinidad, which we fancy will be as much appreciated by Sir John Lubbock as Lady Brassey's description of tropical plants, flowers, and foliage will be by Sir Joseph Hooker. As many of the descriptions are curtailed, we venture to hope that at some future period the authoress may be induced to write her botanical experiences in extenso, a real sylva sylvarum. We could say a great deal more about this book, replete as it is with information on every branch of natural history. Nothing seems to come amiss to the authoress, whose delight seems ever to be to hold converse with Nature; and whether describing the ravages made by locusts—the garden beneath the sea—or the brilliant hues of tropical birds and fishes—Lady Brassey's descriptive powers are as surprising as they are truthful. The work is one that will be largely read; and no better guide-book could be desired by those who contemplate visiting the islands and places so graphically described. Both Mr. Pritchett and the engravers have done their work admirably; more original and better engravings we have rarely seen.

Musketry Instruction for Military and Volunteer Officers, as prescribed by Regulation for Schools of Instruction and for Board Examinations. Compiled by MAJOR C. D. DAVIES, 3rd Volunteer Battalion Queen's Own. Gale and Polden, Brompton Works, Chatham.

MAJOR DAVIES is to be congratulated on having produced a manual of musketry instruction which cannot fail to prove of great advantage to those officers of the Auxiliary Forces who desire to attain efficiency in this important branch of their profession.

Officer's Field, Note, and Sketch Book, and Reconnaissance Aide-Mémoire. Compiled and designed by MAJOR E. GUNTER, East Lancashire Regiment (old 59th) Garrison Instructor, S.E. district. London: Waterlow and Sons, 49, Parliament Street, Westminster.

ALTHOUGH we have—from want of space—been unable to notice this excellent Aide-Mémoire by Major Gunter until now, there can be no question that it is just the sort of book that the arm; would value. It has now reached a second edition, has been most favourably criticised by the leading military journals, and Lord Wolseley in speaking of it says, "It seems a remarkably good and useful Aide-Mémoire." The book cannot fail to prove useful to officers on outpost and scouting duties, as well as to cavalry officers. Major Gunter is a good linguist, and from his knowledge of German has so arranged and written this book as to embody the latest views of reconnoitring, and make it a sine qua non, to those officers who would desire to gain distinction in the sham fights at Aldershot, or when the opportunity differs of distinguishing themselves in an important campaign.

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## THE

# ILLUSTRATED Habal and Military Magazine.

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Vol. II.

# OUR FRONTISPIECE.

THE CHARGE OF THE "UNION" BRIGADE AT WATERLOO.



HE great Duke of Wellington is reported to have said "once upon a time" that it was not the winning of the Battle of Waterloo which gave him so much trouble and anxiety, but the answering of ques-

tions and the giving of explanations afterwards. And certainly there has been more than enough of "questioning" and disputation regarding the incidents of the Waterloo campaign. Historians have agreed to differ, and, as has always been the case in attempts to get at correctness from actual partakers in the fight, there has been considerable discrepancy in the various accounts given by several survivors of that memorable June 18th, 1815.

But with regard to one brilliant episode of that immortal day, all narrators, even historians, seem to be agreed. And French writers have not hesitated to allow that the episode in question was a glorious one in the annals of English heroism, and one of which Englishmen have just reason to be proud.

That episode forms the subject of our frontispiece—the charge of the "Union" Brigade under Sir William Ponsonby. The story has been often told and by various pens, but it is a simple one and can bear being told again, especially when illustrated by "the art which can immortalise."

It may be remembered that after failing in repeated attacks against Hongoumont, Napoleon made up his mind to try and force the centre or turn the left of the allied army. For this purpose he organised two attacks, one of cuirassiers to be directed against the centre, and one of infantry to be directed against the left. The attempt of the cuirassiers was met and promptly defeated by the Household Cavalry, but the attempt of the infantry to

force the left centre was a much more serious affair. This attempt was intrusted by the Emperor to Marshal Nev with D'Erlon's corps of fresh troops, mustering between nineteen and twenty thousand strong. They were arranged in four dense columns, supported by the fire of eighty pieces of cannon, under the cover of which they advanced. On the heights opposite to the French was Sir Thomas Picton's division of infantry, and in rear of this infantry and in support, Ponsonby's brigade—consisting of the Royal Dragoons, the Scots Greys, and Inniskillings—was drawn up on the road leading from Brussels to Charleroi. It was nearly noon, and the cannonade along the whole front of battle was tremendous—nearly four hundred guns on the two sides sending death and destruction from their brass or iron mouths. In the midst of this thunder of war, Nev was directed to attack the farmhouse of La Haye Sainte and to force back if possible the British left, the object being to establish a French body of troops in the vicinity of Mount St. Jean, and to prevent a junction between the English and the Prussians, who were still in the wood. The bold attempt was made with great coolness and courage. Throwing forward a cloud of skirmishers, the enemy, under the roar of their numerous cannon, descended from their own heights, and rapidly crossing the space intervening between them and the British, soon showed the glistening of their bayonets close to Picton's division. A brigade of Belgians in the first line of this division turned and ran before the French skirmishers were within The story goes that the "fiery" Macmusket range. donald, who then commanded the 92nd Highlanders, which formed part of Pack's brigade in Picton's division, made his men "right about face" and give the fugitives a parting volley as they hurried to the rear. But there was other work to be done. The French came on boldly, their murderous fire thinning the English ranks, when Picton sent Pack's brigade, consisting of the Royal Scots, the Black Watch, the 44th and the 92nd Highlanders, at them.

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Advancing with a cheer, these veterans of the Peninsula dashed at the French columns, and sent them quivering and recoiling down the slope in disorder. Ponsonby's cavalry, which were kept in hand behind the hedge of La Haye Sainte, could not witness the shock of battle beneath their very eyes and sit quiet in their saddles with their horses champing their bits. Suddenly a wild cheer rent the air behind the British infantry, a rush of horse was heard, and the brigade, bursting through or leaping over the hedge which had hitherto concealed them from the view of the enemy, made one grand dash at the foe, already disordered by the steady front and galling fire of the infantry brigade. Their foot comrades made way through the intervals of companies and battalions for these impetuous horsemen to pass and to fall headlong on the wavering columns of the French. The result is eloquently told by the historian Alison, whose gallant son holds high rank to-day in the British army: "The shock was irresistible; in a few seconds the whole mass was pierced through, ridden over, and dispersed. In five minutes two thousand prisoners and two eagles were taken, and the French column was utterly destroyed."

The victors determined to push their advantage to the utmost, and supported by Vandeleur's brigade of light cavalry, consisting of the 11th, 12th, and 16th Dragoons, they charged on, crossed the intervening space, rode up the opposite heights, and dashing through D'Erlon's five batteries of artillery, sabred the gunners, cut the traces and hamstrung the horses, thus rendering useless for the remainder of the day no less than forty pieces (Jomini says eighty) of French cannon.

Our artist has chosen as the subject for our frontispiece this number, that moment of magnificent audacity when, with headlong valour which was deaf to any trumpet of recall, the tide of horsemen dashed upon D'Erlon's guns,



# NAVAL ANNIVERSARY.

#### THE 13TH OF MARCH.

THE early morning of this date in the year 1811, saw a squadron of eight French and Venetian ships with several gun-boats, under the command of Commodore Dubourdieu, on their way from Ancona, with orders to take possession of and garrison the island of Lissa, but being sighted by His Majesty's ship Active, 38, Captain J. A. Gordon, one of a small British squadron of four vessels lying to off Port St. George under the command of Captain William Hoste, the order was given to beat to windward in chase. At daylight the enemy was seen to have formed their squadron in two divisions, and were bearing down on the British ships. In a few hours, having nearly come within gun-shot, Captain Hoste formed his squadron in line and ran up the signal "REMEMBER NELSON!" which was received with enthusiastic cheers, and each ship dressed with ensigns and union jacks as if for a gala day.

The Amphion, 32, Captain Hoste's ship, was engaged by the French ship Flore, 40, and the Venetian ship Bellona, 32, but—though suffering severely from their combined fire—Captain Hoste, by attacking first the former and then the latter, was able to compel both his opponents to haul down their colours.

The Active, after a long chase, succeeded in capturing the Venetian ship Corona, 32. The French ship La Favorite,

40, bearing the pennant of the Commodore, had—after receiving one terrific discharge from the Amphion by which Commodore Dubourdieu was killed—gone ashore on the rocks of Lissa, where she was afterwards burnt; the other French and Venetian ships escaped, the Cerebus, 32, Captain Whitby, having had her rudder disabled by a shot, but the Volage, 22, Captain Phipps Hornby, a ship of little over 500 tons, did good execution with her carronades before they got away.

The result of the action was that Captain Hoste captured three of the enemy's frigates (one of which, the *Flore*, Captain Péridier, had, after her surrender, dishonourably made her escape while the *Amphion* was engaged with the *Bellona*), and the principal ship of the combined squadron was hors de combat on the rocks. The crews amounted respectively to 900 English, and 2,000 to 2,500 Franco-Venetians.

Captain Hostè was severely wounded, but he lived to receive what would now be looked on as a tardy and insufficient reward for such a splendid achievement; in 1814, that is, after a lapse of some three years, he was made a baronet and a K.C.B.; and the four British captains were awarded gold medals.



ENGLISH SIDE.

THE ALMA, WITH BRIDGE OVER WHICH DE LACY EVANS'S LEFT BRIGADE CROSSED.

RUSSIAN SIDE.

#### THE CRIMEA REVISITED.

BY LIEUT.-COLONEL LEWIS JONES, LATE 7TH ROYAL FUSILIERS.



May, 1873, I was suddenly offered the opportunity of revisiting the Crimea. Of this I gladly availed myself. I travelled vid Brussels, Munich and Trieste, to Corfu and Constantinople, thence to Odessa and Sevastopol. At Trieste I embarked in an Austrian

Lloyds steamer, the Aurora, and was comfortably transported to Corfu. On anchoring we were quickly surrounded by a crowd of boats, and I was taken possession of by one Spiro, a Maltese, who assured me he recollected me perfectly when I was quartered at Zante, when in fact I had never been in the Ionian Islands before.

I visited the palace and gardens, both of which are much neglected, and went out to the one gun battery and enjoyed the lovely view; a general air of dilapidation and neglect pervades the whole place. What a pity it was considered advisable to give up the Ionian Islands! If they had been retained, possibly it would not have been deemed necessary to occupy Cyprus and incur our consequent heavy responsibilities in Asia Minor.

When I left the Aurora she was a clean decent ship; when I re-embarked she was in possession of about two hundred Turkish soldiers and their families, who were returning to Constantinople from Dalmatia. These were mixed with a sprinkling of Greeks and a few Hadjis from Mecca.

As we turned head to the wind on leaving the harbour that broiling Whit-Monday afternoon, the aroma from that unwashed crowd was awful. They tried to settle themselves all about the deck, and to erect little shelters, but these were speedily demolished by the mates. The ladies were presently separated by a sort of hurdle from the general crowd, and the whole bivouacked on deck till we reached Stamboul on the Friday. When we passed Cape St. Angelo the hermit came out to bless us. I wondered if he was the same old man who witnessed the passage of the armies in 1854. After leaving Syra it came on to blow hard, and, as a French lady on board expressed it, the ship "commençait balancer un peu," and in five minutes the whole of the unhappy deck passengers were violently ill. The next day, when we had entered the Dardanelles and were in smooth water, they made no attempt to clean up the decks or put things straight. Arriving at Constantinople on the eleventh day after leaving England, and

at Odessa, at which place we arrived in forty-two hours after leaving Constantinople. We quitted Odessa on the 12th June, in a much larger and better steamer than the first portion of our Black Sea voyage had been performed in. Amongst the passengers was an uncle of the Shah of Persia, a very stout man, with his whiskers dyed red. He was a pensioner of the Russian Government, having been exiled by his nephew, and was residing near Poti. He had been to Russia to endeavour to obtain an increase of pension, as he found it difficult to maintain his family of twenty-three daughters, all between the ages of ten and eighteen, on his allowance of 4,000l. a year.

At 12 o'clock on the 13th June, twenty-four hours after leaving Odessa, we entered the harbour of Sevastopol. With Charles Kingsley I exclaimed "At Last!" How often I had wondered if I should ever see it again, and here I was—nearly eighteen years after I had been severely wounded at the assault on the Redan and invalided home.



THE ALMA, WHERE PRINCE NAPOLEON CROSSED.

the sixth after leaving Trieste, I met the party I had come out to join, and we left, for the Crimea vid Odessa on the 9th June, in a Russian steamer commanded by an officer who had been in Sevastopol during the siege, and who was in the Redan during the attack on the 18th June, 1855. He was very polite, and of great assistance to us

We put up at the Hotel Weitzel—the house which had been Admiral Nachimoff's during the siege. Sevastopol was as we left it, a city of ruins, partially populated by two regiments, and with but few other inhabitants.

In the afternoon we commenced our explorations. Riding horses were not procurable, but good carriages,

with sufficiently good horses were to be had at a price. We drove around the head of Man of War Harbour, on roads six inches deep in dust, and up to the Malakoff.

I had not of course been inside the Russian lines before, and youngster as I was at the time of the siege, I suppose I had not thought much about the position of the enemy's works; but now, it did seem remarkable that a more determined attack was not made on this position in the beginning of the siege. Before our trenches were opened Sir John Burgoyne pointed out the Malakoff as the key of the position, and stated that storming Sevastopol then, that is, directly after we had made the flank march from the Alma, would cost us 500 men. It did indeed prove to be the key, and when it was stormed by the French, eleven months later, the siege had cost the British Army alone, exclusive of the losses at Alma, Balaklava, and Inkerman, over 18,000 men killed in action, or dead of wounds or disease. From the Malakoff we crossed to the Redan. This work wore a far more familiar aspect to me; but I was much surprised at the conformation of the ground between the two works, being far more seamed and broken than I was aware of. I had never been nearer to the Redan than when I got to it on the evening of the capture of the Quarries, and when numbers of our troops pressed on to the abattis of the Redan in their ardour and enthusiasm at finding so weak a resistance in the Quarries themselves. The fighting there took place later, in the repulse of the determined and repeated efforts of the Russians to retake this important outwork. In the attack of the 18th June we were most of us shot down long before we got to the abattis. From the Redan our party walked across to the trenches. Here, indeed, I was on familiar ground. From the middle of October, 1854, to June, 1855, except during a short interval after Inkerman, I was in the trenches of the right attack at least once every twenty-four hours. Every corner, every turn, was clear to me. The sharp outline of the trenches were worn down indeed by the action of the weather, but they were still as plain in outline as on the day I last saw them in 1855. Here was the very boyau from which we filed out on the fatal 18th June, where, before I could give the word "Front turn," numbers of men fell-for we were not fired at, we marched into a vortex of fire. There I could point out the spot where, on the morning of the 29th October, I was sitting with other officers by the side of Major Powell of the 49th Regiment, and stooping down at his request to pick something up, arose to find him killed by a rifle bullet in the head. On this spot in the twenty-one gun battery I was laid down beside Murray of the Engineers, to have our wounds better attended to than had been possible in the advanced trenches; and here my life was saved, I believe, by Colonel MacDougal giving me a pull at his flask; and so, passing on, we arrived at the brink of the "Valley of the shadow of death," where, in the early days of the siege, the battery covering party remained during the day. It was

here I had passed my first day under fire. There are caves, or rather hollows in the face of the hill; in these the covering party got such shelter as they could. Shot and shell that had missed the battery bounded across the ravine with a crash, or rolled and dropped slowly down into its bed, which in time became paved with missiles of all calibres. Very trying it was to sit under a rock the whole long day under such circumstances. The danger was less than it looked, for I do not recall any casualties there.

From thence we strolled through the twenty-one gun battery to the ravine leading up to the Light Division Camp, and to the spot where, all that terrible winter, my tent had stood. The good sound paths that had been made during the second winter were intact, and the circular marks where the tents had stood were in many instances quite descernible. These, and any quantity of broken bottles, were the only vestiges of our occupation.

The cemeteries at the time of my visit in 1873, and for long after, were in a shameful state. The walls built of loose stones, as they made convenient pens, had entrances made through them by the herdsmen to let their cattle in. The crosses and head stones were overthrown by the animals scrubbing themselves against the sharp corners. All this we may hope has been rectified ere this, in consequence of the action of the Committee which, under the presidency of the Prince of Wales, took the matter in hand in 1883.

The following day we went to Balaclava, which is quite renovated. The shrubs and trees are grown up again; but the vines which were so graceful and plentiful in 1854, have not been replaced. A little sloop was the only vessel afloat in the beautiful harbour. The road from Camp over the Col was in capital condition. Oh! the miserable weary tramps we used to have, half worn out with fatigue, through the slush and mud, to bring up boards for huts, warm clothing, and the like. How many lives would have been saved if this road had existed then!

In the afternoon we went over the scenes of both the famous cavalry charges. I use the word famous in connection with both, for indeed it was the heavy cavalry charge which stopped the onset of the Russian host to Balaclava. The other noble deed of arms was an error which, by its very brilliancy, eclipsed the solid usefulness of Scarlett's splendidly executed charge.

How well I remember the first ride into the plain of Balaclava! The odour of the crushed grasses and meadow-sweet lingers in my senses still.

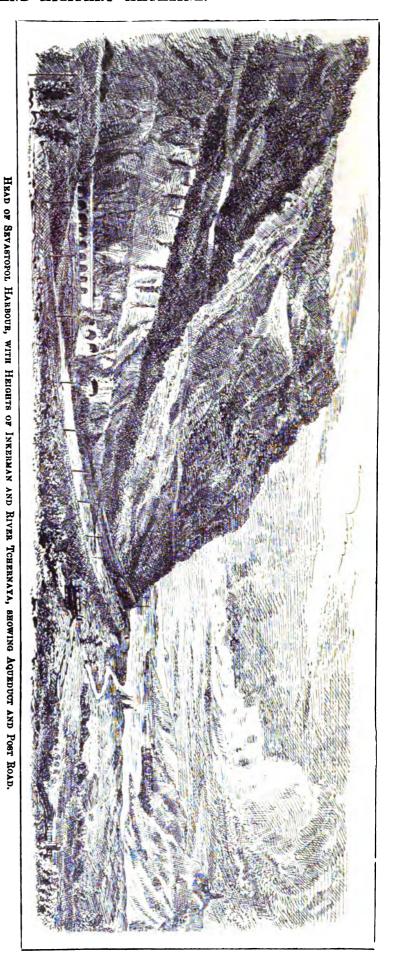
Although the Russians withdrew from the plain and contented themselves with a picket near Canrobert's Hill in December, 1854, it was months before we were able to benefit by it, even to the extent of a ride, owing to the stress of work put on us by constant duty in the trenches. It may possibly seem odd to the general reader, but it is a fact that, excepting one visit paid to the Mamelon after its capture by the French, I was never in any of the trenches except those of the right attack.

To explore the field of Inkerman, we elected to approach it from the Russian side, inspecting the famous caves first. The Greek priest in charge of the chapel was very civil, and let us lay out our luncheon in one of his rooms. He much appreciated the capital Crimean wine we had with us, and as the feast waned, he waxed less pious and more polite in his attentions to the ladies of our party, and we were glad to say good-bye. .We then crossed the valley. Part of us ascended the heights by the post road, the others by the steep hillsides now thickly covered with dense tufts of brushwood. This somewhat astonished me, because nearly all our firewood was derived from the roots of these bushes, and were grubbed up by our over-worked men at a vast expenditure of labour. After the battle every bush concealed a dead foe, many of whom were never discovered till the Armistice in 1856; then the bones alone remained of what was once a soldier.

The sketch is taken from the ruins of Inkerman, and represents the head of the harbour and the spot above the aqueduct near to which some of the Guards and 20th pursued the Russians as depicted in Kinglake's map (No. 6, Vol. V), designated the "False Victory." Victoria redoubt has been turned into a cattle pen; a party of Tartars was camped in the vicinity for the summer. On all the slopes the bushes had grown thick and strong again. The farmhouse in the Careenage ravine, where our Light Division picket used to be posted, was partially rebuilt and occupied as a cattle shed. There must be many who recollect the dog, which in the earlier days of the siege used to come night after night and howl dismally round his ruined home: he would not be driven away, or accept any overtures of friendship; he was rarely seen, but was a constant attendant. He did not add to the cheerfulness of the night watch on that gloomy post. This was the ravine in which some of the Light Division piquet were made prisoners on the morning of Inkerman.

On going over the field of this memorable fight, the thought at once cropped up, Would all the terrible loss of life have ensued had the gallant General Penefather, commanding the second division on the 5th November, followed the example of Sir De Lacy Evans in the battle of the 26th October, and declining to feed his piquets, met the enemy in line on Home Ridge? Again, what would have happened to Codrington's line of skirmishers, for we were nothing more, had Soimonoff deployed on the Victoria Ridge? All this is an oft-told tale. A return to all these familiar localities could not but cause one to reflect on and wonder at many events and circumstances of the memorable siege and battles.

Our next trip was to the Alma. We chartered a covered waggon or araba, which met us at an early hour on the north side of Sevastopol. The road is not well kept, in places it is degenerating into a mere track. The waggon was without springs and the wheels were very far apart, with

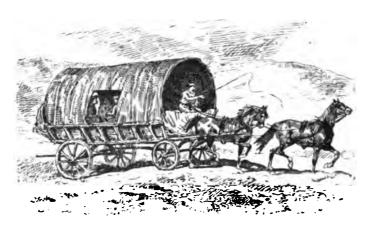


wooden axles. A truss or two of hay were thrown in and we were jolted in a most disagreeable manner. The distance is little more than fourteen miles. The village on the Belbec has been rebuilt, and looked prosperous.

We inspected the battery at the mouth of the Belbec, which was the ostensible, if not primary, cause of our being turned aside from our original project of storming the Star fort, to undertake the flank march and lay siege to the south side. We could only wonder and be sad. Divided command and an over-scrupulous desire to please the French is the only solution of all that afterwards happened. Approaching the Alma from the Russian position, we walked over the site of the fourteen gun redoubt, and on to the river.

The first sketch of the Alma represents the bridge near which Sir De Lacy Evans and his left brigade crossed, and over which No. 2 Company of the Grenadier Guards subsequently filed. The outer beams now alone remain. All this part of the ground is nearly smooth and bare, having on it only some scant herbage. The second sketch is of a point a little lower down on the south side of the river, where there are plenty of trees. It was about this spot that the French division under Prince Napoleon was halted, the little road up the heights to the right being blocked by D'Aurelle's brigade in column of sections. A few graves dotted about were in fair preservation. I believe since the time I revisited the Crimea, the grave of the officers of the 23rd Fusiliers has been fenced in, as well as those of Cust and of Cockerill of the Artillery.

Ah me! And what was all the blood and treasure lavished for? Nothing! A Russian staff officer at Sevastopol said to me, "Well, you see your handiwork much as you left it; but when the railway into Russia is completed we shall begin again, and not stop till we have Constantinople." They have completed the railway, they have rebuilt the docks, they are constructing ironclads, and soon, if they do choose to proceed to Constantinople, are we in a position to say them nay?



THE WAGGON TO THE ALMA.

# THE CARE OF MARTINI-HENRY RIFLES BY THE BRITISH ARMY VOLUNTEERS.



HE British Army Volunteers are at last receiving their long-looked-for Martini-Henry ritles. It is not too much to say that by the issue of these arms, a new era in the existence of the Volunteer force has commenced

—a new life, so to speak, has been e organisation. The British Army

given to the whole organisation. The British Army Volunteers now have rifles in their possession in every respect identical with those in the hands of their regular comrades of the territorial regiments to which the Volunteer battalions belong.

It must surely be a source of satisfaction to know that, in arms at least, the Volunteers are in no inferior position to those gallant soldiers, the conditions of whose service are to go from the shores of their native land, and to fight their country's enemies in every quarter of the world to which they may be sent.

On active service, in garrison, or in barracks, a soldier's primary duty is to see that his rifle is kept clean and in perfect order. So serious is any neglect of this duty regarded, that punishment is awarded to any soldier who does not maintain his rifle in a condition fit for instant use. His life on active service depends upon the perfect state of his rifle and his bayonet. It is not urged that every soldier knows every peculiarity of his rifle's construction, although he is aware of the names of many of its parts. He can remove a few of these for cleaning purposes, he can replace them in their several positions. But there are many he need not remove for cleaning purposes. Repairs to component parts he never attempts. These are effected by the regimental armourer sergeants, who are supplied with spare parts and special tools for repairs or replacement.

The Volunteers do not hold possession of their rifles under similar conditions to those of their comrades of the territorial battalions, since the Volunteers in many instances are allowed to take their rifles home for care and cleaning, and are therefore left to carry out this duty upon their own responsibility. It seems to me, that the Volunteers, having but little supervision by officers over the care of their rifles, and having their arms handed to them on this understanding, are expected to take a more than ordinary interest in the condition of the weapons with which they are intrusted to defend their country against aggression. This circumstance being I hope conceded, a few words on the general principles of construction and action, together with a drawing of every part of the rifle, may assist my friends the Volunteers in the care of their arms, so that they may be able to preserve them in accordance with the motto which many of the Volunteer force have adopted, namely, "Ready, ay, ready." This is a worthy—a patriotic motto.

I will first give the principles of action and construction, and then, as shortly as possible, say what in my judgment and with some experience of the subject, is necessary to keep the Martini-Henry rifle in good order.

The rifle possesses four motions, viz: opened; loaded; closed; fired.

Opened.—By depressing the lever, the motion of its upper arm draws down the breech-block into the position of loading, and by the tumbler, which is on the same axis as the lever and moves with it in this direction only, retracts the firing-pin against the pressure of the surrounding mainspring, the rear end of which abuts against the stop-nut screwed into the back of the block. At the end of the movement the tumbler is sustained against the tension of the mainspring by engaging with the nose of the sear. The piece is then cocked, a condition which is shown by an external indicator connected with the leverpin.

Closed.—By returning the lever to its place the upper arm pushes up the breech-block until it is stopped by striking the face of the barrel. The upper lever-arm is then engaged in a notch under the block, so that its general direction shall be tangential to the arc of opening.

Locked.—By the position of the block and its friction against the head of the cartridge when the piece is fired. It is also braced by the position of the upper arm of the lever, its point of contact being in advance of its centre of motion.

Fired.—By the action of the spiral mainspring, compressed in the act of opening, and released as follows. The tumbler has two notches, one of which is radial and intended for the sear, which may thus sustain the full transmitted pressure of the mainspring without any tendency toward slipping, and one below it for the trigger, sloping slightly upward so as to facilitate its disengagement when the piece is to be fired.

The trigger-pin hole is diagonally elongated and enlarged, so that usually the trigger will hang loosely, but when pressed with the finger to fire the piece, it will rise bodily on the pin along the elongation of the hole, until it presses against the tumbler sufficiently to relieve the sear of some of the stress of the mainspring; at the same time it turns on the pin as a fulcrum, and pressing against a shoulder on the sear, overcomes the resistance of the sear-spring, and pushes the sear out of its notch in the tumbler, so that when released from its own notch, the tumbler and the firing-pin may fall, and so discharge the piece.

This device is intended to lighten the pull-off, and yet to

permit the use of a stiff mainspring and of a safe rest for the tumbler when the piece is cocked. Otherwise, unless the notch in the tumbler were made so shallow as to be unsafe, a mainspring of the strength required to explode the cartridge might bear the tumbler against the trigger so hard as to unsteady the aim in firing, from the great force needed to discharge the piece.

Extraction .-- By two bent levers pivoted below the mouth of the chamber on each side of it, and struck at the posterior extremity of their horizontal arms, by the forward end of the breech-block during its descent.

Ejection.—The continued motion of the breech-block

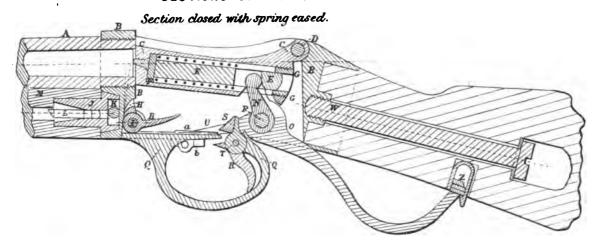
brings its point of application on the extractors nearer and nearer to their fulcra, and thereby accelerates the motion of the upper lever-arms in contact with the flange of the cartridge base.

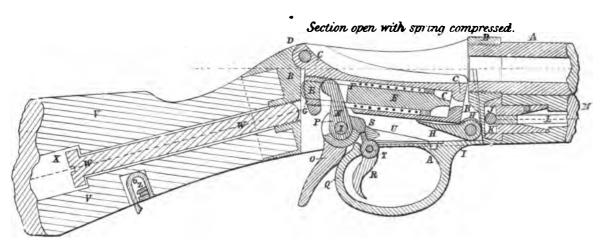
Half-cocked.—A safety-catch, consisting of a slide and external thumb-piece moved backward to block the sear, is intended to replace the ordinary half-cock notch.

The butt-stock is counterbored for a stout iron bolt, which is screwed into the back of the frame.

Note.—This system, when wedded to the barrel proposed by Mr. Henry, constitutes the Martini-Henry

#### SECTIONS OF ACTION.





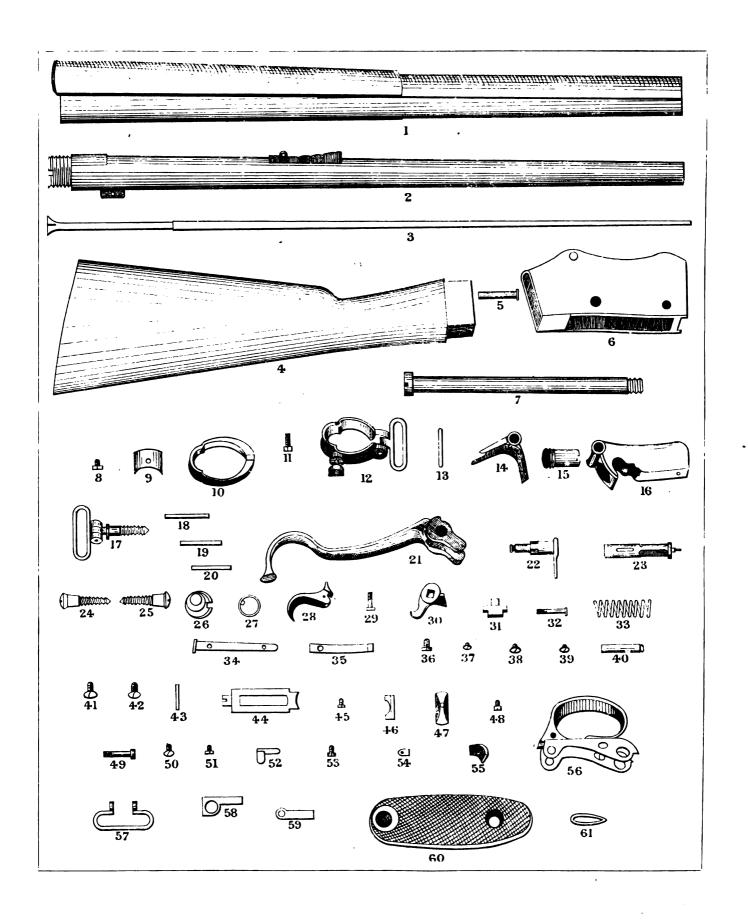
NAMES OF ACTION COMPONENTS .- "MARTINI" SYSTEM.

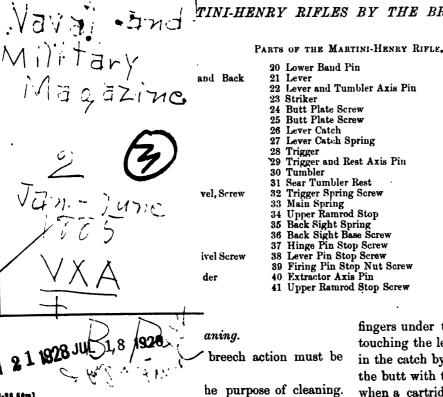
- A Barrel B Body
- CC Block
- Block Axis Pin Striker
- Main Spring Stop Nut Extractor
- Extractor Axis Pin

- Rod and Fore End Holder
- Rod and Fore End Holder Screw Ramrod
- Stock, Fore End
- Tumbler
- Lever Lever and Tumbler Axis Pin
- Trigger Plate and Guard
- Trigger

- Tumbler Rest
- Trigger and Rest Axis Pin Trigger and Rest Spring Stock Butt

- Stock Bolt
- Stock Bolt Washer
- Lever Catch Block Spring and Pin
- Locking Bolt
- Thumb Piece





ine use of gritty or cutting substances, such as emery,

sand-paper, whiting, brick-dust, &c., or of the buff stick,

action-block in cleaning, especially of the striker hole,

3. Care must be taken not to injure the face of the

4. The action can usually be sufficiently oiled by pouring a few drops of oil through the opening between the lever

5. The sight protector is always to be used when cleaning

out the barrel, as the hole in the end, through which the

rod works, is expressly provided to prevent the rod wearing

and the body, when the former is drawn out of the lever catch block; the rifle must be held for this purpose with the

Color

Lower Band Pin

42 Upper Ramrod Stop Screw 43 Back Sight Joint Pin 44 Back Sight Leaf 22 Lever and Tumbler Axis Pin 45 Back Sight Leaf Slide Stop Screw 24 Butt Plate Screw Back Sight Leaf Slide Stop 25 Butt Plate Screw 26 Lever Catch Back Sight Leaf Slide Lever Catch Spring 48 Back Sight Base Screw 49 Guard Swivel Screw 50 Sear Spring Screw 29 Trigger and Rest Axis Pin 51 Locking Bolt Section Screw 30 Tumbler 52 Locking Bolt 31 Sear Tumbler Rest 53 Locking Bolt Section Screw 32 Trigger Spring Screw 54 Locking Bolt Section 33 Main Spring 55 Locking Bolt Thumb Piece Upper Ramrod Stop Back Sight Spring Back Sight Base Screw 56 Trigger Plate and Guard 57 Guard Swivel Hinge Pin Stop Screw Lever Pin Stop Screw 58 Locking Bolt Spring Sear Spring, Trigger and Rest Firing Pin Stop Nut Screw Spring Extractor Axis Pin 60 Butt Plate Upper Ramrod Stop Screw 61 Indicator

> fingers under the guard; press the trigger firmly without touching the lever, and when the lever is closed, secure it in the catch by clasping the bow of the lever and small of the butt with the right hand. Springs must never be eased when a cartridge is in the chamber. This is of the very highest importance to prevent deplorable accidents, and cannot be too strongly impressed upon the Volunteers under every condition of use.

> 12. The outside of the barrel must first be well wiped with a piece of dry flannel or tow; afterwards with a piece of oiled flannel or tow. Care must be taken to gently press the flannel or tow close into the space between the stock and barrel, so that all lodgment of damp or rain is removed from between the interstices, otherwise the wet would form rust that would soon honeycomb the barrel metal. Other outside metal parts of the arm must be similarly treated in order to preserve them free from rust.

> Note.—Rangoon oil, the best that can be procured, is the proper description to use in cleaning and preserving every part of the arm. This oil can be obtained of excellent quality from Price's Patent Candle Company, London and Liverpool.

## 6. Pass the point of the cleaning rod through the sight protector, and screw on the jag.

7. Open the breech.

trigger guard uppermost.

must be strictly avoided.

which must be kept perfectly free.

or cutting the rifling at the muzzle.

- 8. Wrap a small piece of damp rag, flannel, or tow around the jag of the cleaning rod in such a manner as to cover it, and rub carefully up and down the barrel to remove the fouling. Water should not be used. Should the rod stick fast in the barrel it should be driven down the barrel by light blows with a wooden mallet; it should never be dragged through the muzzle.
- 9. Replace the damp rag by an oiled one (woollen if possible), and pass it a few times up and down the barrel.
- 10. Wipe the breech end of the barrel, the interior of the body, and the breech-block as well as possible with an oiled rag.
- 11. Close the breech and ease springs. For this latter action, the breech being open, place the thumb on the thumb-seat, and the forefinger on the trigger, the remaining

#### Instructions for using Trigger-Testers.

1. The "pull off" of military small arms is regulated so as to require a mean weight of about 7 lbs. to be applied to the finger piece of the trigger in order to release the trigger nose from the bent in the tumbler; this result is obtained only when the components of the action, including the trigger, are perfectly clean and free from dried-up oil, or from other matter causing obstruction to the free working of the various parts of the action.

In order therefore to obtain trustworthy indications of the weight of the "pull off," the operator will thoroughly examine the actions of the arms which are to be tested, and clean and oil such as he finds require to be so treated, especial attention being paid to the following points:viz., that the block does not jam against the end of the breech when it is being closed; that the trigger screw is screwed well home.

2. In weighing the "pull off," the arm should be rigidly held (if possible in a vice) in a horizontal position, the indicator side uppermost. The trigger-tester should be held in a line diagonally across the grip, and immediately over the lower corner of the body. If the lever should fail to close on pulling the trigger, this indicates that the action is not in good order, and the lever must then be pressed home by the right hand.

These directions, if carefully followed out, will enable the Volunteers to keep their new arms in good preservation and fit for immediate use. I can only urge upon them that it is not necessary to remove or tamper with any of the action parts. If they attempt to take out the action by removing the block-axis pin, they will find a difficulty in replacing the block, and will find themselves in the position of having to take the arm to either an armourer sergeant or other expert in the removal and replacement of component parts.

A word or two more, and I have completed my friendly task, and these words have nothing to do with the rifle's preservation. When taking a full or medium sight, fire low, to allow for the throw-up of the rifle, when discharged, caused by the lightness of the barrel in proportion to the weight of the powder charge and bullet. Also in practice, endeavour always to correctly ascertain the precise deviation from the line of fire by the drift of the bullet in its passage through the air, caused by the pitch of the grooves in the barrel.

# ANNIVERSARIES OF BRITISH VICTORIES. THE CAPTURE OF CHANDERNAGORE.

It is unnecessary to recount the circumstances which led to the commencement of hostilities with the French in Bengal in 1757. Soon after the re-capture of Calcutta in January, and while the course which the Nawaub of Bengal might take was doubtful, Clive proposed to attack Chandernagore, on the left bank of the Hoogly, about eighteen miles above Calcutta and a little below the towns of Chinsurah and Hoogly. Admiral Watson, who had a strong squadron under his command, objected, unless the Nawaub gave his consent. This difficulty was at length overcome, and when a reinforcement from Bombay of about 400 infantry and some artillery arrived, on the 12th of March, Watson agreed to begin operations at once.

The French settlement of Chandernagore extended about two miles along the river bank, and nearly as far inland. The fort was in the centre of the length of the settlement, and very near the river. It was a square of about 120 yards, with bastions at the angles and a ravelin on the river face extending nearly to the water. The ditch and glacis were incomplete, but to compensate for these defects a number of outworks had been hastily constructed. Nearly a hundred heavy guns were mounted in the fort and its outworks.

Clive approached the west, or land side, on the 13th, and at once broke ground. His force consisted of about 350 of the Madras, and the same number of the Bombay, European regiments (afterwards called the 102nd and 103rd), detachments of Madras and Bombay artillery, and 1,200 Sepoys. About 250 of the 39th were serving as Marines on board the squadron. On the 14th a battery on the north was captured. The possession of this work rendered four other batteries untenable, and they were consequently abandoned, the guns having been previously removed into the fort. Some progress was made, or some slight advantage gained, every day till the 21st, but the prospect of complete success seemed still remote.

On the 23rd the decisive attack was made simultaneously from the river and from the land batteries. Admiral Watson had overcome the difficulties of the intricate navigation, and, passing some dangerous sand-banks, anchored off the fort at daybreak, with the Kent, sixty-four guns, carrying his own flag, and the Tiger, sixty guns. The Salisbury, fifty, was too far down to batter with much effect. Admiral Pocock, having found it impossible to bring his ship, the Cumberland, seventy guns, up the river, was rowed against the stream, with the greatest possible speed, and hoisted his flag on board the Tiger just before the action. The tremendous effect of the ships' cannonade was soon apparent; the fire from the fort slackened, at 9 o'clock white flags were displayed, and a capitulation was signed in the afternoon.

Although the troops under Clive's command, unaided, would have captured the place after some time and with heavy loss, the rapid and decisive success is undoubtedly due to Admiral Watson's two ships. These, from having been exposed for some hours to the fire of so many heavy guns at short ranges were greatly damaged, both in hull and rigging, and their losses in killed and wounded were very heavy. The Kent had an officer and thirty-seven men killed, seven officers (two mortally) and seventy-four men wounded; the Tiger had an officer and fourteen men killed, five officers (including Admiral Pocock) and forty-one men wounded. The troops on shore had only twelve casualties on the day of the capture, and between thirty and forty in the siege altogether.

Admiral Watson's conduct, during all the transactions in India in which he was concerned, was quite clear of the charges of duplicity from which it is, unfortunately, impossible to exculpate Clive. The admiral, who was as amiable and as upright as he was brave, succumbed to the climate, and died before his services could obtain their merited recognition in England.

E. O'CALLAGHAN.

# EXPERIENCES OF A VOLUNTEER ADJUTANT.

1200 2 43

#### BY RICHARD CLYNTON.



HAD been more than sixteen years in my regiment, and the daily routine of barrack life was beginning to pall upon me. Barracks, with few exceptions, are but gloomy abodes. They have an unpleasant likeness to poor-houses and prisons. There are, of course, excep-

tions, and that barracks need not be built according to the above severe style of architecture is fully proved by the noble pile of buildings that graces one side of Knightsbridge.

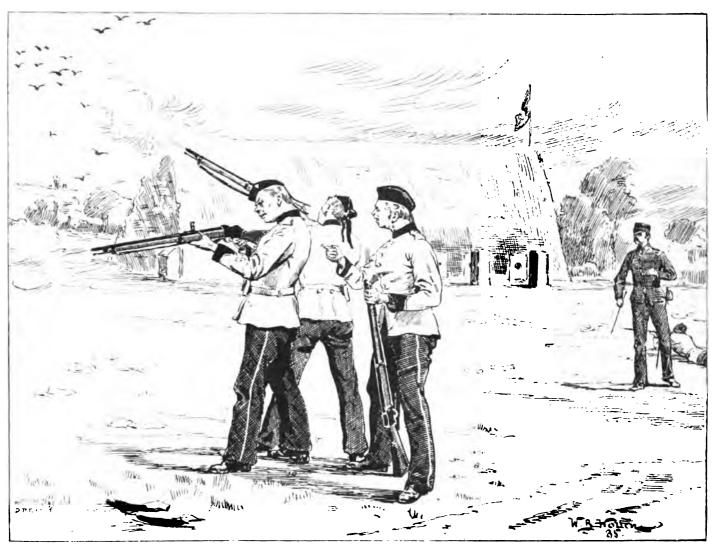
On one occasion I had a most cheerful lookout from my bed-room window. Immediately beneath me was a prison, a little to the right a hospital, while a burial ground stood up on the cliffs above. Often have I watched the prisoners doing their shot-drill, and though I am fond of exercise, I should not like to take it in that particular way. The convalescents walking about the hospital yard were a little more cheerful to look at, but the shadow of the churchyard above with its tall ghostlike monuments seemed to rest upon them. It is a wonder to me that old barracks never get burnt; but there seems to be a sort of providence watching over them. Then the surroundings of barracks are always slummy, and the atmosphere, both moral and otherwise, is not always of the best. Then the daily life inside is not the brightest. It certainly is better than that of either the prison or the hospital, but that is about all that can be said. Then there is the daily parade, the daily orderly-room, and generally the daily prisoner; also the daily visiting of the barrack-room, to see that Tommy Atkins keeps his kit in good order, his things clean, and to draw attention to his dirty pipe, which he invariably secretes between the folds of his blankets. This daily routine is varied by a turn of either subaltern or captain of the day, when you have to inspect the rations, see them properly cooked and of sufficient weight, and go through the form of asking Tommy Atkins if he has any complaints. No doubt he has many, but he generally keeps them to himself. The patients in the hospital are put under the same examination. The soldier is proverbially a grumbler, but in all my long career as a regimental officer I never yet heard him complain either of the quality or of the quantity of his medicine. The list of duties enumerated above may no doubt seem attractive to the casual observer, but after

a time things lose their novelty and grow wearisome. I longed for a change, and as I had no chance of wearing a cocked hat I determined to try for a volunteer adjutancy. I began to wonder why I had never been offered one, for my name had been down on the official lists at the War Office for about ten years. I have been told that things often do lie there for a considerable time unnoticed, but I cannot believe it, the system there being so perfect. I had been to Hythe and had obtained a qualifying certificate, so nothing stood in my way but the will of the military authorities. It so happened that our affiliated Militia regiment wanted an instructor of musketry, and as I wanted change I volunteered and was accepted. I had an agreeable month. The officers were a pleasing lot of fellows, and their men the worst shots I had ever seen, and how murder was not committed is still a mystery to me. Do what I would I could not prevent the fellows from taking pot shots at the crows which lighted or hovered over the places where the men had cast their greased cartridge papers. I remonstrated mildly, but without effect; I even swore. That was equally futile, for any oaths that I could utter sounded like compliments to the costermonger class I was addressing. Occasionally a man would plug with a bullet the ground about ten yards to his front, to the infinite satisfaction of his comrades, who seemed to look upon it as an excellent joke. I did not, for if murder was committed or damage done I knew that I should be held responsible. Things began to assume such a dangerous appearance that, by way of example, I made a whole section prisoners, and this had a good effect. One afternoon the sergeant-instructor brought a man up before me for being absent from parade. The man protested that he had not been warned. The sergeant was equally certain that he had. The militiaman could not stand this sort of thing, so he said: "Sargeant, you says as 'ow I was warned; I says I wasn't. Now I'll bet you a bob I wasn't warned—there now, my bob agin yourn." Had I not been present in all probability the sergeant would have seen his way to making an honest shilling; as it was, the offender was marched off to the guard-room.

During the time that I was endeavouring to teach the militia Tommy Atkins to align the tip of his foresight through the notch of his backsight, I got the offer of a volunteer adjutancy in London. I accepted it and rejoined my regiment at Shorncliffe, and presented myself

before a Board of officers who were to ascertain my fitness for the appointment. My board, in the first instance, was composed of three sucklings of the Guards; the president, though of my own rank, having at least ten years less service. I expostulated—of course through the proper channel—and the captain was taken off, and a colonel of the Guards put on in his place, and though he had many years less service than myself he was of far superior rank, so the wound to my feelings was healed. The examination was very hard as I

The Volunteer adjutant I relieved I never saw, so I could get no hints from him as to my duties. The colonel, who was much my junior, had been for about two years in the regular service. He was a very keen Volunteer, and believed thoroughly in the movement, placing it far above the Militia. Without going as far as this, I think the Volunteer deserves well of his country; he certainly cannot now complain of ridicule. My commanding officer read me a well-intentioned lecture. He told me the men I had to deal with were splendid fellows, but that



MILITIAMEN POT SHOOTING AT TARGET PRACTICE.

thought, and my gentlemanly but juvenile board asked me a lot of irrelevent questions in connection with the Militia. I explained that I was for the Volunteers. They apologised, and asked me what kind of questions I would like to have. I replied that I had no choice in the matter, but as I believed Volunteers never got drunk, and as I was sure they received no pay, it was no use giving me questions about stoppages in connection with such an offence. They apologised again, and I proceeded. Having passed my examination I took up my appointment.

they must be handled with tact. He said the organisation had gone through many trials and stages, and that the purely civilian element was giving way for more soldier-like principles, and that he had made a clean sweep of all regimental committees, which, he thought, were subversive of military discipline; in fact he had cleared the way, he said, so that my zeal and energy would have a fair field to work upon. He then introduced me to the permanent staff.

It is said that a poet is born and not made. The same

may be said of a soldier who is a good drill. After many years' service I can only remember two men who to my mind were exceptionally good in this respect. I served under many different commanding officers, but not one passed beyond the modest bounds of mediocrity, while some were considerably below it, giving wrong words of command and then swearing at their officers and men because their intentions were not carried out. The only two drills I have ever seen was the adjutant of my regiment when I first joined, and the sergeant-major of my Volunteers. Both of these men had the rare qualities of a fine commanding voice, and a clear precise method of imparting their instruction. They both too had an eye that could detect a mistake at once, and fix the fault upon the right shoulders. If a man moved in the ranks, by name he was called, and the moral effect of this upon a body of men is extremely great. I do not say that faults could not be found. For instance, my sergeant-major was strongly conservative, and any little reform that I wished to bring about in the corps I had his weight, metaphorically speaking, upon my shoulders. He weighed, bodily and mentally, eighteen stone. He could never be driven. He was one of those who had to be led by the silken cord of diplomacy. My other staff sergeants I found were also excellent fellows, so, as far as the head-quarter work went, I expected smooth sailing.

My predecessor was under the old régime, and though no doubt the Volunteer system owes a very great deal to those adjutants who nursed it in its infancy and instructed it as it grew in strength year by year, yet the introduction of the five years' men was an undoubted benefit to the organisation; for a man, no matter what his ability, is likely to become fossilised by a long continuation in one place. My predecessor was, I believe, of a choleric temperament, and when things went wrong—as they will do in the best regulated Volunteer battalion—I believe the language he used to make use of was more forcible than polite. cannot say that I never swore in my line regiment—the stupidity of some not over-intelligent Tommy Atkins would sometimes extract an oath. I condemn the practice, although I am not a total abstainer in this respect. But I was now. as it were, making a fresh start in life, so I determined to turn over a new leaf; besides, the Volunteers are such a superior lot of fellows that I felt sure I should never have occasion either to lose my temper or use an oath. Both are bad habits, and they cannot be defended upon any grounds.

My first days with the Volunteers were not amongst the happiest of my existence. Everything was new and strange to me. I made up my mind to support'my commanding officer to the utmost of my ability, for I was brought up in an old military school, which taught all subordinates to look upon the officer commanding as a king to whom every thought and feeling must bow in submission, so I determined to be loyal in my present

position. For long hours thoughts such as these were my sole companions. Our head-quarters were in one of London's oldest and most honoured squares, and my orderly-room window, which was on the ground floor, looked on to some gardens. My office was a dingy den that no amount of dusting seemed to keep clean. I say no amount of dusting; I speak this subject to correction, for perhaps the amount of dusting was limited. For my convenience I had a washing-stand complete. It looked very old, the soap very dirty, and the cupboard underneath smelt very strong. I am fond of old china, but there was some there I could have dispensed with. For hours I have sat watching the gardener sweeping his leaves and trimming his beds, and I wished he would plant a few flowers in front of my window; but the place was bare and dismal looking, and much frequented by cats. A London garden has not very much brightness about it. The trees and shrubs look dingy, and the flowers even seem robbed of their beauty. They look tawdry—something like a dirty bespangled stage dress seen by day. Sparrows were plentiful; I loved to hear their noisy little voices, but they too looked dirty, though nothing seemed to damp their spirits. Even the cats had an unwashed and disreputable appearance, as if they spent most of their time in dissipation upon the tiles. The gardens in front of my window—I only had one—seemed to be the favourite resort of all the cats in the neighbourhood. Here they made love and fought, squalled and mewed, and made as much noise as is made in the House of Commons on a big night when all the Irish members are present. Occasionally one (cat, not an Irish member), would come and sit upon my window-sill, but when it caught sight of me it would start and stare, and the expression on its face seemed to say, "What the devil brings you there?" He seldom waited for an answer, but bolted as if he expected the reply to be in the shape of either book or boot.

Things looked more cheerful as my work began to interest me. I found that in the Volunteer year there are four periods upon which everything depends. The Easter review comes first, followed by the brigade drill, the inspection, and the muster of efficients at the end of the year. The inspection was the first thing I came in for, and there was the usual amount of anxiety, though the fever is not so virulent as it is in the regular army. The Volunteers are frequently let off very easy. All inspecting generals are in virtue of their office "brutes" in the regular army, but where Volunteers are concerned the milk of human kindness seems abundant, and nothing but praise is bestowed. This is not wanted by the Volunteers, who would much rather have fair criticism than fulsome flattery.

There are exceptions to every rule, and the colonel commanding our district had more vinegar than oil in his composition, and it generally was poured over the back of the adjutant, who, being the only one absolutely available, used to get well pickled. My predecessor, I believe, shies even now at the sight of a vinegar bottle.

We were drawn up in line in our square ready to receive our inspecting officer, and the pavement all around was lined with an admiring crowd. We were considerably cramped for room; this rendered manœuvring a difficulty. The great man came; the bugle sounded; the men presented arms with marked irregularity, and the colonel's horse stood upon his hind legs. The order to "shoulder" was given, and the inspecting officer rode down the ranks. The band struck up, and the major's horse on the right nearly knocked down three or four files. The inspecting officer spotted me at once, for I was still in my line uniform,

men are for ever pushing themselves forward into public notice, but it has been a principle with me never to do so when a general is on parade. The feather of a cocked hat always seems to wave me back into obscurity.

Of course we marched past, but as each company was in front of the inspecting officer immediately after the wheel on to the saluting base, there was no time for the men to settle down; so the march past, the grand test of every military parade in our country, was a failure, and the inspecting officer was kind enough to let us know his opinion upon the subject. The officers were now called



THE SENIOR MAJOR'S HORSE.

and I was sent for. "I see, sir, there is great variety of pouch in this regiment, and an equal variety of opinion as to where it should be worn. Have you no uniform system in the corps? Then I see the belts are not all the same, and here's a man with gaiters. Which is right, gaiters or no gaiters?"

- "No gaiters, sir," I replied.
- "Captain Clynton has only just joined, sir," the colonel said, wishing to help me.
  - "That is no excuse," was the only reply.
- I took the earliest opportunity of dropping back unobserved into my place on the left flank. Some military

out, and each one, from the senior major downwards, went through the very common military manœuvre of losing his head. Each one shot out his words of command in such a hurried manner that mortal man could not act upon them. I felt disposed to swear, but my reputation was saved in this direction by my being called out in front of the battalion.

- . "Now, Captain Clinker."
- "Clynton, sir," I said respectfully, as I saluted, for one must never forget to salute even if he is going to be damned.
  - "Eh!" screamed the inspecting officer. I was conscious

that I had committed an error, for if a general puts a name upon you you must bear it, in spite of your god-fathers and god-mothers, or a whole line of ancestors.

"Put them through the manual and firing exercises, sir."
I took the battalion in hand, and as he found no fault,
I imagine he was either pleased, or perhaps displeased, for
with some it is more pleasant to curse than to bless.

- "How long have you been here, sir?"
- "Six weeks, sir," was my reply.

"Well, I should have thought that that would have been sufficient time, sir, for you to have pulled your men more together. The movements were loosely done. There was too much straggling, too much straggling, sir; far too much talking in the ranks. Your supernumerary rank

make as much noise as a flock of sheep on a turn-pike road. I hope the next time I inspect you I shall see a marked improvement. Good evening, colonel; you've got a good battalion, but they want licking into shape. I hope your new adjutant will do it."

The colonel said something to him as he rode away; his reply told the nature of the communication.

"Nothank you, colonel; much obliged, but I never take supper. Good day to you, good day." Then he said to his galloper, "Damned unwholesome things, suppers; but you can go if you like."

The subordinate's powers of digestion being

better than his chief's he came, and apparently very much enjoyed himself.

Fortunately this was the last time we were ever inspected by this particular officer, for Providence removed him to a higher sphere, namely, the one that is densely populated by major-generals.

As the cocked hat of the inspecting officer disappeared under the archway that led out of the square, I became aware, for the first time, of the presence of a most peculiar individual. He was on horseback, and had on the semblance of a uniform of such an antique shape that for a moment I thought I must be looking upon the Ancient Mariner turned soldier. His visage was old; his hair was long, and so was his tunic, which was of a grey colour, while our uniform was green. His head was covered by

an old-fashioned chaco with a green ball in front, and on his hands he wore an old pair of kid gloves that had once been white.

No one took the slightest notice of him, and he seemed to be treated by every one with a neglect bordering upon contempt. I found this was the honorary-colonel of the corps. Every line regiment has its full colonel, this is for the benefit of the colonel and not the regiment. Every Volunteer corps has its honorary-colonel, this is for the benefit of the corps and not the colonel; and if the latter does not add dignity to the corps by his personal appearance and his exalted position, and add to its prosperity by yearly grants of money, he is like the soldier who cannot shoot, an incumbrance to the service.

The British army is largely composed of such as these.

After parade the presence of the honorarycolonel was thrust upon the colonel, who seemed of a sudden to be deprived of blindness.

"How do you do, sir; charmed to see you. This is our new adjutant, Captain Clynton, our Honorary-Colonel, Lord Strathspey."

"I shall be glad to confer with you," his lordship said, "about the corps, Captain Clynton, whenever you like to call upon me." I found that as the colonel-commanding ignored the honorary-colonel, so the latter ignored the former, and he seemed to think that

Wa Walley

THE HONORARY-COLONEL.

the adjutant was the only one with whom it was necessary to have the slightest communication.

The mounted officers were not by any means creditably turned out. The horses were all hired for the occasion, my own amongst the rest. They were badly groomed, the bits and stirrups were dirty, and the saddles of most were patched, but as the government allowance was not nearly enough to keep a horse, to say nothing of buying one, I determined to do as others did, more especially as I read in the Volunteer Regulations that adjutants who did not draw the regular forage allowance would be re-imbursed in their actual expenses. As will be seen later on, I found this to be one of those fables peculiar to regulations emanating from the War Office.

The result of my first inspection was by no means

gratifying to me, and it left me with a depression of spirits from which I did not recover for many days. The next morning in the orderly-room I said, "Things were not very satisfactory yesterday, sergeant-major."

"No, sir; General Bumpus, sir, is a very severe man, and I have never known him to praise much. You see, sir, these inspecting officers don't understand Volunteers, and many of them expect too much, while others expect too little."

"Did my predecessor ever swear on parade, sergeant-major?"

The sergeant-major's face wore an expression that spoke volumes.

"There is not much to be gained by it," I said, in a moralising tone, thinking how very near I had been to committing the offence on the previous evening.

"Like flogging, it is useful at times, sir," said the sergeant-major. "More especially on active service."

"Ah! on active service no doubt a good round oath would be effective."

Our inspection over we rested for awhile, until the time came for us to make preparations for the Aldershot campaign. My colonel was very anxious to take down the head-quarters and to have command of a provisional battalion. To insure this it is necessary to have a certain number of one's own men. A return was called for, but as it was impossible to fill it in accurately, we did so approximately, and I was a little surprised to see the figures sent in; but the object was gained.

The sergeant-major when he saw the return, smiled his bland and childlike smile, which said so much. I ventured to doubt our ever getting the required number, but my colonel was an optimist of an advanced order, and he replied, "Not get the number! Why, we shall have double as many men as we want; and if we don't what does it matter?"

"But you have sent in a return for a certain number; on the strength of this they have given you a command."

"Of course they have; the very thing I wanted."

"But the men?"

"Oh! it will be all right, if our own fellows don't come forward, we can get heaps from other corps."

This was not my idea of the manner in which an official document ought to be construed, for in the service such a thing is looked upon as the embodiment of strict accuracy; but with the Volunteers I soon learnt that you must not construe according to the strict letter of the law. Returns must be approximate, and as the War Office is fully aware of this, it is to be presumed that they draw their conclusions accordingly.

What a merry time we had at the orderly-room! Our machinery was in full working order. Camp duties had to be drawn up and regulations made, and as I was determined that nothing should be left undone to make the thing a success, I had everything laid down on paper.

We had our difficulties. At the last moment one of our majors had lost a child, and he must needs stay at home to bury it. Our surgeon-major, who was equally anxious either to inflict or cure injuries, begged to be allowed to go down as a combatant field-officer, but I said it could not be. I had, on previous occasions, had great difficulty in preventing him from drawing his sword on parade; he was so full of martial zeal that the lancet was frequently lost sight of and his attention turned entirely to the sword. I told him that we could not possibly take him away from his duties of attending upon the sick. He was disappointed, and said he would have much pleasure in doing his own duty and that of major. He found me obdurate. Volunteers of all grades are very gluttons at their military work, and you cannot ask them to do too much, for the reason, perhaps, that they are called upon to do so little.

A captain also came to me; he was short of a subaltern and wanted to dress up one of his sergeants and take him down as one. I said such a thing was out of the question. The captain pleaded. He said "He is an excellent fellow, and knows the drill-book by heart."

I answered that I was extremely sorry, but that if he knew all the red-books ever published and every general order into the bargain, he must go down to Aldershot with his sergeant's stripes on, or not at all. My obduracy was looked upon by this officer from a personal point of view, and for the whole Aldershot week I was under his displeasure.

Then I had a lengthy correspondence with the different corps about dress. Some were fully equipped, while others were not. Some wore chacos with black hackles, others had chacos with green bobs, while some had helmets. We issued our orders based upon the military equipment of our own regiment. We said that the men were to parade in forage caps, great coats neatly folded, and gaiters. One officer, either wilfully or through stupidity, took this order literally, and wrote to ask if his men were to have nothing on besides, suggesting that this was no country for a state of nudity, and that the men would suffer very much from the climate if not from the police.

The day came and our detachment paraded at our head-quarters, and notwithstanding the explicit orders which had been issued to every man, there was every diversity of costume that the limited equipment of my Volunteer corps admitted of. One man, indeed, had on a pair of mufti trousers, and when questioned he said he was very sorry, but his "regimentals," as he called them, were worn out, as he had been to Aldershot in them for three years. The poor fellow was so crestfallen when I told him that I could not possibly let him go down in such a dress, that the sergeant-major got over the difficulty by taking him to the armoury and rigging him out in a part-worn pair. Every rifle, I found, had a walking-stick thrust down the barrel; one man had a cat in his haversack, while a dog's head looked out of another's. Long before I had finished

my inspection the order was given to "equalise" and "tell off," and soon after the words "quick march" were heard, and I rode to the head of the column to see it march off parade. The drums and fifes struck up the march of the "Mulligan Guards." The bugle-major, an old linesman, swaggered past, and just as I began to congratulate myself upon the smart appearance of the fifers and the correct finish of the drummers as they all with one accord squared their elbows, I was horror-stricken to see that the big drummer, who was beating away to the admiration of the multitude, had on a pair of Oxford shoes and no gaiters, while his trousers had worn so short that there was a good three inches of dirty white sock to be seen. I sent for the bugle-major. "Have you inspected your bugle-band?"

"Yes, sir."

"Then why the devil do you allow the big drummer to come on parade in such a dress? Do you see him? Damn him, he has shoes on."

The bugle-major came back from the big drummer and said, "He says he can't wear boots, sir, because they hurt his feet." "Damn his feet," rose to the tip of my tongue, but I kept it back, for I had already been dangerously near the breaking of my resolution. The big drummer was a necessity, so I could say no more. Pride, it is said, will have its fall, and mine had that day more than one.

The men entrained without hurry or confusion, and in a very short space of time. At the station we were met by two of our detachments, the rest we were to pick up on the way. The whistle blew, the train moved, and there was as much waving of handkerchiefs as if we had been bound for a military picnic in the East. We steamed out of the station; one or two fifers played "Good-bye, sweetheart, good-bye." There were cries of "Good-bye 'Arry," "Good-bye Chawlot," "Keep yer pecker up Chawley!" and away we went.

Notwithstanding all our orders upon the subject, we detrained at Aldershot a most motley looking crew. Certainly our coats were all green, but we had every description of head-dress known to the infantry soldier of the present reign. One detachment stood in all the conscious pride of the fully-equipped soldier, being complete even to the smallest detail. As one of my own corps observed, "They had 'em all on." Our own equipment was meagre in the extreme, being about as simple as it could be made, and we had made this the basis of our dress regulations. But our orders had been treated with contempt.

As I sat on horseback and contemplated the varied scene, I could not help exclaiming "Good God! did any one ever see the like of this before?"

The sergeant-major, who was standing by, saw my discomfiture, and with that smile that was so peculiar to him said, "It will be all right when we are shaken down in camp, sir; you must not expect the same regularity as if you were dealing with regular soldiers."

"Apparently not," was my only reply.

We marched through the town of Aldershot to our encamping ground, past the red-brick church. We found a bare sandy spot between two woods, with a line of commissariat waggons drawn up with our camp equipage. Some of our men had never seen a tent before, but I had taken the precaution to have a number of copies of tent-pitching instructions printed and distributed to the non-commissioned officers, who were ordered to explain to the men their different posts and duties on the way down, and the men working with intelligence and a will, the sandy desert soon became a busy tented field, and in a couple of hours everything was ship-shape.

The next day being Sunday we were marched to a riding-school in the cavalry barracks, where we had divine service in an odour more of horses than of sanctity. Before the church-parade was dismissed the Articles of War and Mutiny Act were read:—

"Any officer, non-commissioned officer or man, who shall blow trumpets, beat drums, fly kites, &c., or otherwise intimidate the enemy, shall on conviction thereof before a general, district or garrison court-martial, suffer death or such other punishment as such court may have power to award."

The Articles of War have always sounded to me like the cursing creed in the Prayer-book. "Cursed is he that removeth his neighbour's landmark," &c.

We had no trouble with our men. Our discipline was very strict, but it was readily submitted to, and in a few days we had a very smart and soldier-like battalion, one that any soldier might be proud to command. We had exceptionally fine weather, and camp life was pleasant and extremely healthy. I had a regular system. For the first two days I persuaded the colonel to let me have the battalion, and I ground the men in the first principles of drill and kept them at it, treating them exactly as if they were regular soldiers. What I had most to contend against was a disposition to talk and to look about in the ranks, but this was quickly cured.

I do not say that the Aldershot work was altogether a bed of roses for me. I nearly broke, on more than one occasion, the good resolution I had made about swearing, and many oaths were strangled before they were uttered. Some of the officers of the battalion maintained that I swore before we had been in camp twenty-four hours; some going so far as to say that I even swore before we left London, but this could scarcely be.

I hired my charger from a livery stable in London, and did not take a groom with me. I did this to save the Government expense. I knew that such a consideration was foolish in the extreme, but I was guilty of the weakness, and so kept my horse at livery at Aldershot and gave the man who brought him to each parade ten shillings at the end of the week. He was contented, and the Government was saved two or three sovereigns at the

very least. I mention this for reasons to be explained hereafter.

The glare of the sun was so great that many of the men's eyes were completely bunged up, and the whole battalion looked at the end of the week as if it had been nightly engaged in pothouse brawls; but it was the sun and nothing more.

I had great difficulty in getting the sentries on duty to pay the proper compliments. Every cocked hat, no matter whether it covered the head of a doctor or of a commissariat officer, came in for a present. The men had been told to look out especially for the Brigadier and the Divisional-General, and many a doctor had the compliments paid him. It so happened that the two great men came the same day, the Brigadier first. The guard was turned out and the compliment was correctly paid. Then the cry went through the camp that the Divisional-General was coming. Every tent was fluttered and there was a general tidying-up and a rushing to and fro. The guard was turned out when the General was quite a mile off, so eager was the sergeant in command to be ready, the consequence was that by the time the General got up the men were tired and unsteady. But still as I looked on I felt proud of the fellows, but again my pride had its fall, for just as everything was going off so well, the sentry, in whose mind a great struggle seemed to have been taking place, suddenly came to a terrible conclusion. He had presented arms to the Brigadier, but a greater man stood before him and deserved therefore a higher compliment, so holding his rifle with his left hand he let go the small of the butt with his right, and seizing his forage cap took it off and held it at arm's length in a slanting position. If there was any doubt about my swearing before, there was none now, but the nature of the oath, for very shame, I will not publish. The General smiled and rode away with the colonel, and as he did so I heard him say "You've a very smart battalion, colonel." Directly the General's back was turned, the sergeant of the guard flew like a tiger at the unfortunate sentry, who had a very unhappy five minutes. The sergeant was for making a prisoner of him at once, and frightened the poor fellow into the belief that he was liable to be tried by court-martial. The sergeant was a red-hot soldier, and fully believed that shooting was too good for the offender. I interceded, but the sentry did not hear the last of it for a long time.

After we had been at Aldershot four clear days, we struck our tents and removed to a distance of some four miles, pitched our camp again, made camp kitchens and had the men's dinner cooked; we then changed back to our original camping ground. Then came the great treat of all for the Volunteers, namely, the field-day. The regular soldier has too many of these to be over fond of them, and if he has an excuse to be absent he quickly takes advantage of it. With the Volunteer it is different, and on such an occasion it is difficult to get a man to stay

in camp, or even in hospital. We were the flank battalion of our brigade, and we were ordered to advance in echelon of companies from the right. The sand was heavy, and the day was hot, and the right guide of No. 1 was very stout, so in a short time he began to lose touch and to drop behind, until he became a conspicuous object. I was riding close by him, but seeing his difficulties I said nothing. Presently an officious staff officer rode up and said to the lagging subaltern, "And pray, sir, what are you?"

"Do you see that company ahead there?" said the subaltern, pointing with his sword to the leading company of the battalion, "I'm its right guide."

"Are you? then you've no business here."

"I know that; but the pace, you see, is a bit too good for me."

The staff officer did not like being treated thus coolly, and wishing to show his importance, said to me, "You don't seem to have selected a very intelligent officer to lead your battalion, sir."

I have always had an unjust prejudice against Staff College men, for I have always thought them to be puffed up with that vain conceit which frequently accompanies a smattering of learning; so I replied "I fancy he would teach most fellows at the Staff College a thing or two."

"What do you mean?"

"Why, that that officer whom you think so peculiarly wanting in intelligence, was the senior wrangler of his year." This was perfectly true.

The staff officer suddenly found that his presence was required in another part of the field.

There is another amusing story of a mistake once made by the colonel of a cavalry regiment. A well-known Volunteer corps was down at Aldershot for a week, and it had taken its ambulance waggons down with it, and the horses were billeted in one of the cavalry stables. The colonel of the cavalry regiment was going round one day and saw a Volunteer in his shirt sleeves, strapping away at his horse with a will.

"Well done, my man; you're putting your back into it; you seem to know how to clean a horse. You look like a soldier; were you ever in the cavalry?"

"No, sir," the man replied, standing strictly at attention.

"What are you then?"

"I'm a Volunteer."

"I know that, but what are you when you are not a Volunteer."

"I'm an R.A."

"Oh! Royal Artillery, are you?"

" No, sir, Royal Academician."

"The devil you are!" Then turning to his adjutant, he said, "These Volunteers are queer fellows, ain't they?"

Our brief Aldershot campaign ended we returned to

town, the fellows looking sunburnt and well. Eyes were still swollen and some were closed, while the scorching rays had played sad havoc with the Volunteer nose. This prominent feature of the face generally comes in for a fair share of anything that is going, and if a blow is fooling about the nose generally catches it. Some of the men's noses were a mass of dried skin, some shone in a coating of glycerine, while others looked painfully raw.

All we had to do now was to get the men up to make themselves efficient. Our parades were fairly well attended, and we invariably had an audience, more especially of small boys. These ragged urchins were a source of great annoyance, more especially to one of our majors, who was somewhat irascible. Their delight was to watch for the "firing" exercise, when a score or more would get in front of the battalion, and directly I gave the command "fire" and they heard the "snap" of the rifles, they used to fall down all over the place pretending to be shot. Now was the major's time, and those within his reach felt his cane upon a not-too-well covered portion of their bodies. This was usually followed by a volley of abuse and stones from the dirty little blackguards, who only made themselves scarce when a policeman appeared upon the scene.

To induce the men to come up, we had a uniform parade and a march out. We wanted also to give them some instruction in outpost duty, so we rendezvoused at Westminster, in the open space by the Houses of Parliament, and marched to Clapham Common. Just as we debouched upon the open ground, a horse in a dog-cart which was coming towards us took fright at our band. animal turned sharp round and bolted, and came violently in contact with a milk cart that was jogging along quietly from an opposite direction. We saw the two men in the dog-cart thrown out on one side, while the milkman and his cans were thrown out on the other, and the clattering of the cans added to the fright of the runaway horse, which could be seen in the distance careering away with the shafts only of the dog-cart, the latter he left in pieces by the side of the milk cart.

Our band was stopped after the mischief was done, and when we reached the scene of the catastrophe the battalion was halted. The milkman was not hurt, but as he had been thrown into a furze bush he was pricked and scratched, while his milk bedewed the road. The two gentlemen in the dog-cart were not seriously injured either, but their tempers were completely upset, and they were just beginning to pull themselves together as we arrived. When I say that they were horse copers I need scarcely add that their command of vituperative language was extremely great, and to one learning the art of personal abuse this would have been an excellent opportunity of picking up a good deal of learning.

"Well, this is a pretty go," said one, scraping the dirt off his clothes with his knife.

The colonel apologised; but this elegancy of society was thrown away.

- "We wants no apologies," said coper No. 2. "We wants damages for this 'ere cart."
  - "It was no fault of mine," said the colonel.
- "No fault of yours! Whose was it then? Do you suppose my horse would have bolted, if it had not been for your blooming band, braying like ten thousand jackasses?"
- "If you'd 'a kept your own side of the road, guv'nor," said the milkman, "you wouldn't 'a run into me."
- "How the devil, milky, can you keep a bolting 'orse on his own side'? Of course you've never experienced the difficulty, with the cattle you drive; that thing of yours wouldn't bolt even from a knacker's cart. But we've got something else to do besides argue; you'll oblige me with your name, sir. These little difficulties are best settled in a law-court. I am not sure that I and my mate haven't some bones broken."
  - "Our doctor is here," said the colonel.
- "Thank you, I don't want the opinion of your Volunteer doctors. No amateurs for me. It is a shame for the Government to let you fellows go about, kicking up such rows with your blooming bands. As far as I can see you're no good; a company of real soldiers would put the blooming lot to flight."

The colonel was beginning to lose his patience, so he said, "Here's my name and address; I don't wish to have any further discussion upon the matter. Do your worst."

- "All right, guv'nor, don't lose your temper. Perhaps you'll become abusive. You'll hear from us again."
  - "Fall in there in your fours," cried the colonel.
- "The sooner you get your rabble out of this the better," said coper No. 1.
  - "Who's going to pay for my milk?" the milkman asked.
- "No use crying over spilt milk," said one of the men
- "You would, though, if you had to pay for it," replied the milkman.
  - "Milko!" came from another voice.
  - "Silence," I cried.
  - "Hello!" said coper No. 2, "are you taken ill?"

The colonel gave the command, "Quick march," the copers fired their parting volley of abuse and away we went

The milkman again asked who was going to pay for his milk, and tried to saddle the responsibility upon the two copers, and I heard one of them say, "You wants us to pay, do you? Well, milky, you go to the devil or to the nearest pump, and get paid there."

(To be continued.)

## MILITARY BALLOONING.

(COMPILED.)



INCE the ill-fated de Rosier's famous ascent in 1783, numberless enthusiasts have been willing to risk their lives for the advancement of a science involving infinite possibilities, but, until lately, seemingly narrow probabilities. The public at large, dis-

gusted by repeated failures, and by the fact that for a century after Mongolfier constructed his first balloon, aeronautics had advanced but a few steps towards the perfection at first expected, ceased to be interested in the experiments of those whom they regarded as dreamers or visionaries. Ballooning languished until the use found for it during the Franco-German struggle (and particularly

during the siege of Paris), gave a fresh impetus to a neglected and somewhat despised study.

The use of balloons for warlike purposes does not, of course, date from 1870-71. The French, who were the first to invent and the first to risk their ives in the frail aerial barque, were the first to recognise the practical use to which it could be turned. In the campaigns of 1793 the French generals first used balloons for the purpose of reconnoitring the enemy's position; and to this fact is ascribed their

victory at Fleurus in the ensuing year. The Entreprenent, the balloon employed on this occasion, was under the direction of M. Coutel, captain of the aeronauts at Meudon, accompanied by an adjutant and a general. Twice in the same day they ascended to the height of 1,320 feet, and, remaining four hours in the air, communicated the result of their observations to General Jourdan by means of preconcerted signals. Although a hostile battery opened fire upon them, they soon gained an elevation beyond its range. The Entreprenent was constructed by the Aerostatic Institute for the army of the north. Another balloon, named the Celeste, was intended

for the army of the Sombre and the Meuse; while two more, the Hércule and Intrépide, were apportioned to the army of the Rhine and the Moselle. The army of Italy, again, received one thirty feet in circumference and 160 pounds in weight. A new machine, called the "Aerostatic Telegraph," invented by M. Coutel, was intended to aid the aeronauts in communicating intelligence. In spite however, of the success of these trials, the difficulty of generating sufficient gas, and other unsatisfactory details, induced Napoleon eventually to close the Aerostatic Institute at Meudon.

In the Italian war, again, in 1860, the French employed balloons for reconnoitring purposes; and their example seems to have been followed by the Americans in their

civil struggle, not only

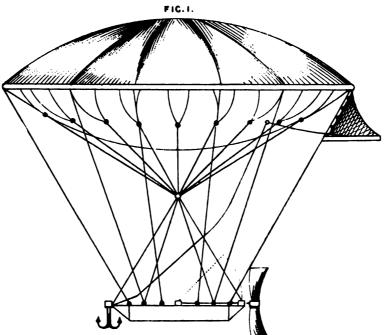
\* for reconnaissance, but in order accurately to direct their artillery fire upon besieged cities. The use of the balloon in these cases appears to have been attended with the most satisfactory results.

In 1852, however, Henry Giffard had already constructed a balloon impelled by second.

means of a 3-H.P. high pressure steam engine with a vertical boiler. The screw made 110 revolutions per minute, and imparted a velocity in a calm of from 2 m. to 4 m. per Giffard ascended on the 24th

September, 1852, alone from the Hippodrome at Paris. Although the strength of the wind precluded him from directly resisting its influence, he performed, nevertheless, a series of manœuvres sufficient to display the steering qualities of his invention, and to establish for himself the reputation of having been the first aeronaut who was not entirely at the mercy of the winds.

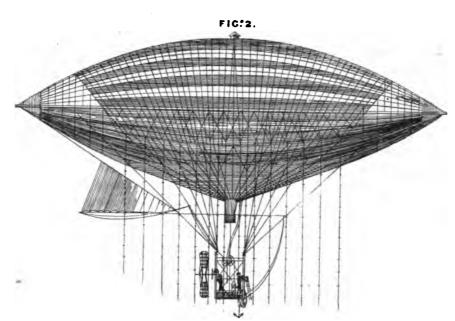
The siege of Paris forms the next era in the history of ballooning. Dupuy de Lôme, a marine engineer, was intrusted with the construction of a steerable balloon according to plans laid before the Academy of Sciences. In consequence of the industrial condition of the city at



DUPUY DE LÔME'S BALLOON.

that critical time, he was unable to complete the work during the siege; and it was not until 2nd February, 1872, that he made his first ascent from Fort Neuf, near

Vincennes. The balloon (see Fig. 1) was about 40 m. long and 14 m. in diameter at its broadest part. capacity was 3,454 cubic metres. Unlike his predecessor Giffard, who used steam, and his successors, the Tissandiers, who employed electric power, Dupuy de Lôme had recourse to human strength to move his propeller. The screw, which was 8 m. broad, was worked by from six to eight men. At its



TISSANDIER'S BALLOON.

rear end the balloon was provided with a triangular sail for steering purposes. This sail, which could be moved by means of a rod, was 5 m. in height, and had a superficial area of 5 m. square. The practical result of de Lôme's experiments were much the same as those of Giffard. With a wind velocity of but 2 or 3 m. per second, the aeronaut could steer to whatever point of the compass he pleased. When impelled by a stronger current of air he could only deviate to the right or left of the course on which it urged him.

A now almost forgotten experiment, by Haenlein, a German engineer, took place a short time afterwards. It is even claimed that his invention was prior to that of Dupuy de Lôme. Whilst Giffard used steam, and Dupuy de Lôme human muscle, Haenlein employed a Lenior gasengine, and it is reported that he attained a speed of 5.20 metres per second—double that of his French rival.

But the future of ballooning will probably be inseparable from that of electricity. The application either of steam power or animal force was almost equally objectionable. The former involved a constant change of weight, while that of the latter, though constant, was too great for practical purposes. Electricity is open to neither of these objections. The manifold improvements lately effected in its application as a motive power have enabled the Brothers Tissandier, and, somewhat later, the co-aeronauts Renard and Krebs, to make use of a force involving at once a small and constant weight.

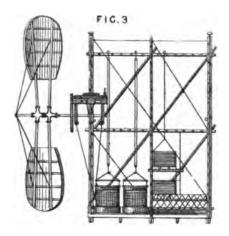
In the year 1881 the former exhibited at the Electric Exhibition at Paris a working model of a balloon impelled

by means of an electric motor. They claimed for their invention that it obviated the risk of fire, the enormous weight of the boiler and the constant change of weight

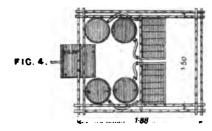
through combustion, involved in Giffard's machine. The model 3½ m. long and 1.3 m. in diameter. It was inflated with hydrogen gas, and could lift 2 kg. An accumulator supplied the electricity. while the motive force emanated from a Siemens dynamo machine. The former was 1.3, the latter 0.22 kg. in weight. The balloon was able to move at the rate of 1 m. per second.

The success of

the experiments with this model, recorded in the Report to the Electric Exhibition, induced the ingenious brothers to continue their experiments. In their own works at Auteuil they have been engaged during



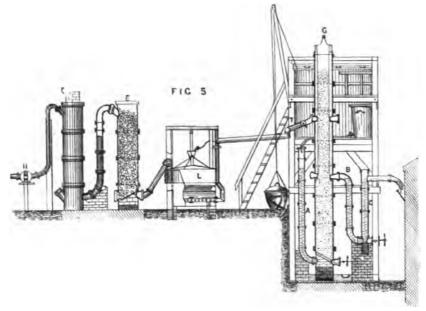
Tissandier's Car and Screw.



TISSANDIER'S BATTERY.

the last few years in the practical application of their system to large balloons, though, as they expressly said, that with which the two last experiments were made was intended only for experimental study. Their first public ascent took place on 8th October 1883. Their balloon, similar in appearance to those of Giffard and Dupuy de Lôme, measures from end to end 28 m., its longest diameter being 9.20 m. Its cubic contents amount to 1,060 m. The car, as may be seen from Fig. 2, is parallelopiped in form. It is constructed of bamboo canes, bound firmly together with copper wires covered with silk and gutta percha. The suspending ropes are connected by a cord running horizontally round the whole, sustaining on one side the steering apparatus, and on the other the anchor and other materials for landing. It is claimed for this arrangement that, in descending, weight is equalised

as far as possible. The weight of the balloon, with its motor (the driving power of which lasts for three hours) and other necessaries, is 704 kg. The motive power is derived from a Siemens electric dynamo machine, acting on a screw provided with two wings, each 2.85 m. in breadth. The metal tube of the screw is hollow, and is fitted with two long laths of deal (see Fig. 3). The outside edges are covered with Spanish tubing,



TISSANDIER'S GAS GENERATOR.

while the wings of the screw, which are made of silk, are coated with gum varnish and kept expanded by steel wires. The general construction of the small and handy battery may be seen from Fig. 4.

The balloon itself is inflated with hydrogen gas, obtained by the action of sulphuric acid on iron filings in the apparatus shown in Fig. 5. The filings are contained in four cylinders 6m. high (G) which consist of eight single earthenware pipes of 45 cm. thickness. The sulphuric acid is prepared with three volumes of water in large reservoirs in front, flows through the pipe A under the iron filings, while the sulphate of iron escapes by the pipe B to C. The generated hydrogen ascends, and, passing through the pipe T, is purified in the vessels E. In the glass vessel H there is a thermometer and hygrometer.

This apparatus, which is capable of producing 300 cubic

metres of hydrogen per hour, was constructed by M. Tissandier himself. Every cubic metre has a lifting power of 1,180 g. The inflation of the balloon, which began at 8 A.M., was complete by 2.30 P.M.

The first experiment took place, as has been said, on 8th October, 1883. The aeronauts ascended at 3.30 in the afternoon, a slight east-south-east wind blowing at the time. At the surface of the earth this wind was, indeed, scarcely noticeable, but at the height of 500 m. its velocity was about 3 m. per second. A few minutes later the screw was set in action. The instant apparent increase in the strength of the wind explained to the aeronauts the success, so far, of their invention. They soon found, however, that their balloon was only able to maintain its place, not to make any headway against the current; and in consequence of a sudden twisting movement which the rudder was unable

to prevent, they descended after a voyage of one hour and a quarter, on a large plain in the neighbourhood Croisy - sur - Seine. Although the balloon had fulfilled in part the hopes and expectations of its inventors, the experiment can scarcely be said to have been satisfactory.

A second and more successful ascent took place nearly a year later, on the 26th September, 1884. The following is a con-

densation of the Report submitted by M. Gaston Tissandier to the Academy of Sciences in Paris at its sitting on the 29th of the same month.

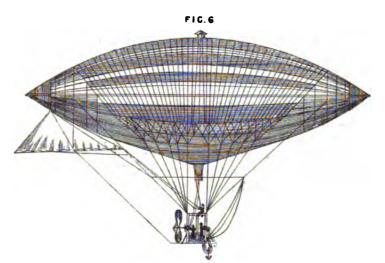
The balloon rose at 4.20 P.M. from the aerostatic atelier at Auteuil, and after a journey of two hours descended in the neighbourhood of Marolles-en-Brie (see accompanying map). The conduct of the balloon left on the whole nothing to be desired. It answered certainly and correctly to every movement of the rudder, which is now attached to the extreme end of the balloon (see Fig. 6). This arrangement enabled the aeronauts to make a number of evolutions over the city, and, as may be seen from the chart of the course, to steer as often as they pleased against the wind. The velocity of the latter, which was constantly changing, was from 3 to 5 m. per second. The speed of the balloon itself, in consequence of

improvements in the motive power, reached about 4 m. per second.

This trial, as M. Tissandier believes, demonstrates, so far as experiment can, the steerability of symmetrical spindle-shaped balloons provided with a screw in the rear of the car. "The arrangement to which we have arrived, similar to that of Messrs. Giffard and Dupuy de Lôme, is extremely favourable to the stability of the balloon. It does not however, preclude the possibility of constructing very long and very large balloons which alone can insure a future to aeronautics. Messrs. Renard and Krebs, however, have proved that the screw can with advantage be placed in front of the car and very close to the body of a fish-shaped balloon. They have, thanks to the use of an extremely light motor, attained a speed to which no aeronaut has yet approached. We may be allowed to commend the good work done by Messts. Renard and

Krebs, as in their turn those learned officers have acknowledged our priority in the use of electricity."

More than usual public interest was evinced. during the autumn of last year, in the experiments of two officers in the French service, who have for some years past devoted themselves to the study of aeronautics in the school of military ballooning at Meudon. The balloon, which was constructed under their own direction, differed widely and radically from the numberless forms and



TISSANDIER'S BALLOON WITH IMPROVED RUDDER.

shapes, some logical and reasonable, others at once absurd and grotesque, in which clear-headed inventors and wild enthusiasts had thought to find the solution of this difficult question.

The principles which guided Captains Renard and Krebs in the construction of their balloon were briefly the following:

- 1. Regularity of motion, to be attained at once by the form of the balloon and the fixture of the rudder.
- 2. Minimum resistance of the air through the choice of suitable dimensions.
- 3. The least possible distance between the centres of motion and resistance, in order to maintain vertical stability.
- 4. The attainment of the greatest possible independent speed, to counteract the velocity of the wind.

The more or less theoretical part of the work—the VOL. II.

method of inflation, the attainment of the greatest possible longitudinal stability, the proportionate dimensions of the car, the construction of a new and extremely light battery—devolved on Captain Renard. His co-worker, on the other hand, was engaged principally with the details of construction—the arrangement of the network, the screw, the steering apparatus, and the invention of an exceptionally light and powerful motor. Parenthetically, it may be observed that the method by which the motor is constructed is kept a, profound secret by the French authorities.

The balloon, which is made of Chinese silk, is 50.4 m. long, and 8.4 m. broad at its widest part. In shape it is least unlike the fish balloon of Sanson, which it resembles in the fact that the front is proportionately broader than the rear. The car, which is brought as close as possible to the body of the balloon, is 33 m. long—not the least

startling Messrs. of Krebs's Renard and many bold and striking deviations from aeronautic precedent. The relative position of the screw and the rudder differs, again, from that adopted by most other aeronauts. The former, generally attached to the rear of the car, is in this case brought to the front; while the latter, usually fixed to the body of the balloon, is now attached to the rear of the car.

The total capacity of the balloon is 1,864 cubic metres. Its lifting

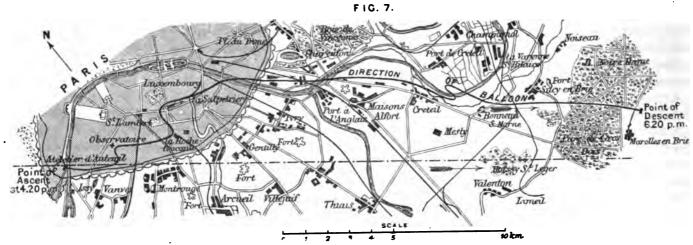
shapes, some logical and reasonable, others at once absurd power is 2,000 kilogrammes, which is, roundly, apporand grotesque, in which clear-headed inventors and wild tioned as follows:—

	Kgs.
Balloon and interior apparatus	. 369
Netting, etc	. 127
Car	. 452
Screw, screw shaft and rudder	. 118
Motor, stand, etc	. 145
Battery apparatus and accessories	. 435
Two passengers	. 140
Ballast	. 214
Total.	2,000 kg.

The first public ascent in this balloon was made at Chalais, at 4 o'clock in the afternoon of 9th August, 1884. After rising slowly above the surrounding heights, the

screw was set in motion, and its influence became at once apparent. Answering the helm most satisfactorily, the balloon held a southerly course to the road between Choisy and Versailles. Having proved to his satisfaction the

The first part of the experiment was, then, wholly satisfactory. The screw was now dispensed with, and the balloon allowed to drift in the direction of the intended landing place at Velizy. In consequence of an accident to



SECOND COURSE OF TISSANDIER'S BALLOON.

steering powers of his invention, Captain Renard resolved to descend at the spot from which he had started, in spite of the limited space available for such a landing. Under the influence of the steering apparatus, the balloon tacked in but eleven degrees of a circle of 300 m. diameter, and reached Chalais without difficulty. Diverging here to the left, it was brought, after a few evolutions, immediately over the spot desired, and, the valve opened, began gradually to descend. When about 80 m. from the ground, a rope was let down, and the balloon was quickly hauled to the

identical spot from which it had set out on its novel and anxious voyage. The total distance covered was 7.6 km., while the time taken was twenty-three minutes. This would show an average speed per second of 5.5 m. It must be remembered, however, that this experiment was conducted

throughout in almost a dead calm—a fact which detracts considerably from the practical significance of this otherwise favourable result.

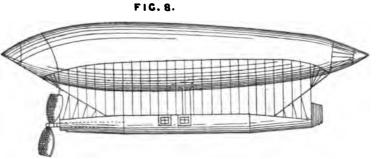
Another experiment with this balloon was made at Meudon, in the presence of M. Campenon, the late French Minister of War, at 5 P.M. on 12th September following. In consequence of a strong wind, the steerability of the balloon was not so apparent. It rose almost perpendicularly to a height of 400 m., and performed a number of evolutions, describing first a semi-circle, then diverging from right to left, and finally making a complete tack.

the machinery, the experiment, which had hitherto been so successful was closed by a hasty though not perilous descent.

On 8th November last, M. Campenon attended again an experiment with the same balloon. Ascending at Meudon, the balloon was steered towards Paris, passing the Seine near the bridge of Billancourt. Here the aeronauts drifted for five minutes with the wind; and then setting the screw in action, described a semi-circle, landing, after a journey of forty-five minutes, at their starting place. These and a

few other evolutions in the afternoon of the same day are reported to have been in the highest degree satisfactory alike to the Minister and to the ingenious and untiring aeronauts.

In considering the relative speeds attained by the five most successful inventions



RENARD AND KREBS' BALLOON.

during the last thirty years, we arrive at the following proportion.

# Metres per second. 1852. Henry Giffard, steam . . . . 4·00 1872. Dupuy de Lôme, human muscle. 2·80 1872. Haenlein, gas . . . . . . 5·20 1883. Tissandier, electricity . . . . 3·00 1884. Renard and Krebs, electricity . . . 5·50

The proportions of motive power to dead weight differed very greatly. The following are the approximate weights assigned to 1-H.P.:—Giffard, 6,000 kg.; Dupuy de Lôme, 3,000 kg.; Haenlein, 730 kg.; Tissandier, 500 kg.; Renard and Krebs, 236 kg.; showing a large and constant decrease n the weight of the balloon as compared to the motive power. Furthermore, the weight of the motors per 1-H.P. 290, 1,200, 146.4, 186 and 77 respectively, show, when it is remembered that Dupuy de Lôme employed human muscle, a progress almost equally satisfactory.

The employment of captive balloons, in spite of these improvements alike in speed and steerability, is not likely to be quickly superseded. The German Government, especially, have been encouraging to the utmost, experiments with the object of rendering captive balloons safer and steadier than they have hitherto been. The Balloon Detachment of the German army have lately constructed a captive balloon provided with an entirely new arrangement for insuring steadiness. A violent storm raging throughout the latest experiment rendered its marked success doubly satisfactory and conclusive. The network of the balloon was not joined, as is usually the case, in a ring. It was fastened to an iron rod two inches thick and ten metres long. The wire rope (1 cm. thick) for keeping the balloon captive was fastened to the extreme ends of the rod; and the two parts were joined twenty metres below it. The car is suspended above the middle, and is secured by safety ropes attached to the extreme end of the rod. In consequence of this arrangement, the car was but little affected by the violence of the storm. Its steadiness formed a striking contrast to the dangerous positions into which it With the exception of the wire is usually thrown. rope, the whole apparatus was constructed by the Balloon Detachment.

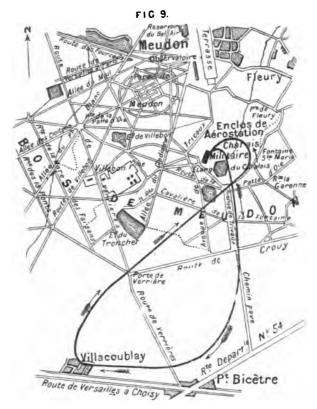
It is generally understood that in consequence of late experiments, the British Government can compress gas into cylinders which can be carried on wagons with troops in the field. Sufficient gas can by this means be transported on a few wagons to inflate a balloon capable of carrying one, or even two aeronauts for purposes of observation, over an extensive district. If the results be as great as generally believed, there can be little doubt that the science of military ballooning has received a decided impetus. At present the officers carrying on the experiments, are to a necessarily careful extent conducting their operations with a due amount of caution and secrecy.

It is reported from France—land of aerial invention and aerial castles—that early in the present year, the world is to be astonished and the science of war revolutionised by the public experiments of two Frenchmen. The one, whose name is not given, is said to have invented an aerial velocipede, which is to be moved by means of pedals acting on screws. The second surprise in store for an expectant world, is an invention of M. Eugene Godard's. This ingenious gentleman is said to have constructed an aerial torpedo-boat intended to accompany troops attacking fortified places. Its cubic capacity amounts to no less than

5,000 metres, and it can be inflated, according to report, in a quarter of an hour. An ingenious contrivance, it is said, protects the balloon and the aeronaut from the enemy's fire. M. Godard has informed the inevitable interviewer, that in his aerial torpedo-boat he can laugh at the heaviest cannonade.

"I can land," he said, "where and when I please, I can rise over the besieged city and fling my bombs, each of which may weigh 1,000 kilos, on the heads of the enemy."

Whether the expectations of this experienced and enthusiastic aeronaut will be verified, is open to the greatest doubt. But should his anticipations prove correct, what dangers may await the soldier of the future! The havoc



FIRST COURSE OF RENARD AND KREBS' BALLOON.

wrought by the latest inventions in small arms, the enormous improvements in machine guns, even the terrors of the subterranean mine and land torpedo, will be light as compared to the fire which would rain from the heavens upon his devoted head. That such an invention would revolutionise war need scarcely be said.

It is gratifying to be able to say that the military authorities of this country, have become fully alive to the advantages of ballooning as a valuable aid in warlike operations. The opportunity is now being taken to test the practicability of the most recent improvements in the preparation of apparatus for inflating balloons and applying them to reconnoiting purposes.

Three balloons are being taken out—the Sapper, the Fly, and a newer one not yet named. All have been manufactured at the School of Military Engineering, Chatham. Compressed hydrogen for inflating the balloons is carried in strong iron cylinders twelve feet long by one foot in diameter, but these are only for a reserve supply, and weigh half-a-ton each. They will be left behind at the base of operations, where also a gas factory and pumping station will be put up. Materials for this purpose are being conveyed to the Soudan, including a small gas-holder and all the necessary chemicals. To meet first requirements, however, as well as to keep pace with the fighting column, about 100 lighter cylinders, easily carried by men,

form part of the equipment. Each of these, which are nine feet long, contains 120 feet of hydrogen in a compressed state. One wagon containing one ton of stores will be sufficient for a balloon ascent, the gas used being so buoyant, that 4,150 feet will lift a man 1,000 yards. It is in contemplation to keep the balloons charged in the Soudan and carry them inflated in the rear of the army. Captive ascents only will be made. Communication by telegraph will be established between the car and the ground, and the chief employment of the new war balloons will be to take observations of the enemy's movements.



## ANNIVERSARIES OF BRITISH VICTORIES.

## THE CAMPAIGN OF CUTCHEE.

THE word "Cutchee" is borne on the appointments of the 1st and 2nd Scincle Horse, in commemoration of the services of those regiments, then called "Jacob's Horse," in an arduous campaign of which comparatively few have ever heard.

In the beginning of January, 1845, Sir Charles Napier (then Governor of Scinde) started from Sukkur, with about 4,500 men, to subjugate a wild tribe called Bhoogtees, who inhabited a rocky and desolate tract on the north of Scinde, called the Cutchee Hills. Napier's force consisted of Jacob's Horse, the 6th and 9th Bengal Irregular Cavalry, the 2nd Bengal Europeans (afterwards 104th), two regiments of Bengal Native Infantry, detachments of some local corps, horse, foot, and camel; and last about 300 men, who had volunteered from the 13th Light Infantry—Sale's veterans, most of them—when that

regiment was ordered home. After enduring great hardships and having several sharp encounters, Napier found himself, on the 28th of February, in the immediate vicinity of Trukkee, the last stronghold of the fierce hillmen. On the 8th of March, through some misapprehension of orders, an attempt was made to scale this nearly inaccessible fastness by a sergeant and fifteen men of the 13th Volunteers. Of this small party six were killed and three wounded, in a desperate hand-to-hand struggle at the summit of a precipice with seventy hillmen, of whom seventeen were killed. Though this hopeless assault failed, its moral effect was at once seen, for on the next day, the Bhoogtees, convinced that the capture of their last place of refuge was inevitable, surrendered.

E. O'CALLAGHAN.



## CROSSING THE LINE.

#### BY CAPTAIN BACKSTAY.



ANY a blithe young tar had we on board the good ship *Magnificent*, and not a few of maturer years, who had not crossed the line before, or paid their respects to Father Neptune. Some had sailed the China seas, and

some had mopped their brows on India's burning shores; but they had dodged through the Suez Canal and had not crossed that mystic zone, where

"Neptune holds his court amidst the waves,
And treats his novices to quick and easy shaves"

with plenty of salt water to wash the lather off, and a good wholesome pill in case the climate has not agreed with their constitutions.

About an hour after dark, on the night before we crossed the line, a deep voice was heard forward, as if coming from

a boat under the bows, and hailing the ship, "Ship ahoy!" The officer of the watch, ever on the alert, replies from aft, "Who hails the ship?" "Father Neptune. What ship is that?" says the voice. "Her Britannic Majesty's ship Magnificent, Captain Backstay, bearing the flag of Admiral Lord Benbow," replies the officer of the watch. Neptune then asks, "Are there any on board who have not been in my dominions before?" "Yes, plenty," says the officer of the watch. "Then," says Neptune, "tell the Admiral that I shall pay him a visit to-morrow, in order that my barber may shave all the new hands, and tell him to have a list of them ready for my secretary." "Aye, aye, sir," says the officer of the watch. A tar barrel is then set on fire and thrown over the lee bow. It floats quietly astern, illuminating the ship and the calm sea around her, and on this fiery galley Neptune is supposed to have taken his departure until to-morrow.

On the following morning a spare sail is got up from below, and a monster tank is made of it, and filled about four feet deep with water; a platform is erected above this tank, and here the mystic rites take place; here sit Neptune, Amphitrite, and their court consisting of the barber and his assistant, the doctor, and numerous Tritons. By a simple arrangement the patient having been shaved, and having received an allowance of pills according to the state of his health and the temper of the doctor, is tipped backwards into the tank, where he is seized by the bears who quickly wash the lather off, duck him according to his merits, and pass him along and out at the other end of the tank.



But stop. I am going too fast. First comes the grand procession. When all is ready and the uninitiated sent below, and each hatchway guarded by one of Neptune's policemen, Neptune—got up in spangles, with an enormous red beard made of oakum, a trident in his hand with a red herring stuck on the top of it—mounts his triumphal car, with Amphitrite (a stalwart young sailor in petticoats) by his side, and attended by his court and preceded by a band of music (?) consisting of three brass instruments, one of which plays "God save the Queen," another, "Rule, Britannia," and the third, "Hearts of Oak," he makes his way aft to the quarter-deck. On this occasion Neptune's triumphal car is a Whitehead torpedo

carriage, which no doubt feels rather strange to him. Having arrived on the quarter-deck, he is there received by the admiral, who is attended by his steward having



under one arm a bottle, and under the other a teapot. Neptune and the admiral salute each other and exchange



compliments. Neptune says he remembers seeing the admiral in his dominions before, and then inquires after Queen Victoria, and is forthwith asked to drink her health.

This he does with pleasure; then Amphitrite is asked to do the same, and she assents, but as ladies don't drink spirits she is helped out of the teapot; she looks disappointed and turns up her pretty nose, but as soon as she tastes it she smacks her lips and asks for more, so the conclusion is that the teapot contains the same mixture as the bottle. Whatever it is, the barber, the doctor, and the Tritons make short work of it, and then the procession moves off forward again, Neptune and his court mount the platform and the fun begins. The secretary produces his list of the uninitiated. This has been carefully prepared some days before. Then one by one they are blindfolded down below, brought on deck between two of Neptune's policemen, thence conducted on to the platform, where they



all undergo the mystic rites. First there comes a gay and gallant lieutenant, scion of a princely house, who, though he has sailed on many a sea, and watched the sun set behind many strange and distant hills, has never before crossed Neptune's sacred zone; so he must submit himself to the gentle attentions of the barber and the doctor, which he does in a serene and graceful manner, and gets off cheap in consequence.

Ah! who have we here? Our friend the parson, and a stalwart parson too, though at present in a very unclerical garb; but what a good figure he would have cut had "he lived in the brave days of old, when bishops went out to war!" He mounts the platform with a firm and steady tread and a smile upon his face, trustful (though blindfolded) he opens his mouth for the proffered pill, and is accommodated with a bolus about the size of a pigeon's

egg, which with confidence he proceeds to masticate, for he can scarcely swallow it à la pill; but he is not allowed much time to think about the process, for he is quickly in the hands of the barber, who being no respecter



NEVER ACAIN

of persons or parsons, the official gives him a rough and ready shave, and then tilts him over into the tank, where his reverence falls into the gentle clutches of the bears, who duck him in a most orthodox manner and then let him go.



Next comes a bold marine, who mounts the platform as if he were storming the rock of Gibraltar. He likewise receives the gentle attentions of the doctor and the barber

with profound equanimity, as if he were accustomed to this sort of shaving and physicking every day of his life. Then, when it comes to the time for "back tilt," he is too quick for his persecutors, turns round, slips through their fingers, and takes a header into the tank on his own account; being somewhat at home in the water, the bears find him rather a tough customer, and are not sorry to get rid of him. After the bold marine comes a gentle and learned follower of Æsculapius, who it appears has for some days been boldly affirming that he will not be shaved to please anybody, that he would lock himself up in his cabin and resist all attempts that might be made to draw him; but some of his friends have given him timely advice as to the futility of trying to carry out such a resolution, as his



AN EASY SHAVE.

own messmates had as firmly made up their minds to draw him at all hazards, so he makes a virtue of necessity and submits; but his guilty conscience smites him—he remembers that he has defied the great sea-god, and that now he is in his power. It is with a trembling step and a face as pale as a ghost that he mounts the platform and submits himself to the tender mercies of Neptune's satellites; the doctor (Neptune's doctor) evidently thinks, from his pale face, that he is very ill and requires much physic; the barber also thinks the beardless face requires copious and repeated applications of lather and a prolonged and rather heavy scraping with the ponderous two-handed razor. It is not wise to defy the gods!

A goodly string of novices follow, who are treated more or less according to their merits, and then we come to the midshipmites, seniors first and then the little ones. What little shrimps they look with nearly all their clothes off, led helplessly along between two great policemen! The barber looks at them with somewhat of pity in his eye,



IF THEIR "MAS" COULD ONLY SEE THEM NOW.

and a happy thought seems to strike him. "Ah!" he exclaims, "we'll do two of these little uns at a time;" and so down they go on the seat together, the barber's assistant holds their heads close to each other, and the barber with his immense brush slaps the lather across their two little smooth faces as if it were one individual, then two or three rapid passes with the razor, and over they go into the



tank; but they are very lightly bandled by the bears, as if they were afraid of breaking such fragile little creatures, and they get out again very soon. This novel mode of expediting the business excites great merriment, and the fun goes on fast and furious; another brace or two of midshipmen, and then we have done with the officers and

we come to the ship's company. One of the first of these is the admiral's steward, who comes up between two policemen with nothing on but a pair of bathingdrawers; he appears to have had some intimation that



A ROCOR AND TUMBLE WITH THE BEARS.

he is to be roughly handled, as he looks somewhat pale and trembles, and no doubt wishes he was well out of this business. It is not altogether strange that the sailors should take such a particular pleasure in tormenting the cooks and stewards when they get the chance. They are men who usually come from the same rank in life, but are nevertheless raised somewhat above them in the social sphere of a ship. They do not have such hard work, they wear grander clothes, eat of their master's food, and not unfrequently ape their master's manners and give themselves grander airs-offences which "Jack" cannot forgive, and for which he naturally takes an opportunity of this kind to square accounts.

The barber looks at the steward as much as to say, "I've got yer now, my fine fellow!" All sense of gratitude appears to have departed; in fact, he seems to have forgotten entirely that only about a quarter of an hour ago this same steward was serving out grog to him and his mates on the quarter-deck. Then he takes his monster shaving-brush in his hand and flourishes it over the steward's head, and asks him a question; the steward (still blindfolded) essays to answer the question, but the moment he opens his mouth, "dab" goes the huge shaving-brush into it, with a gesture as much as to say,

"Ah! you will wear a white waistcoat, will you?" Then off comes the handkerchief, and slash goes the shavingbrush right down the whole length of his face; "Ah! you will wear a tail coat, will you? and you will eat fresh meat at sea and all the delicacies of the season, while me and my mates have to eat salt junk and tin rag? Well, we're even now, anyhow, or rather, I think I've got the best of this;" and he proceeds to give him such a shaving that he will scarcely want another before he gets to Monte Video. Then he tilts him over into the tank, and the bears, seizing hold of him and taking their cue from the barber, give him a most unmerciful turn in the water.

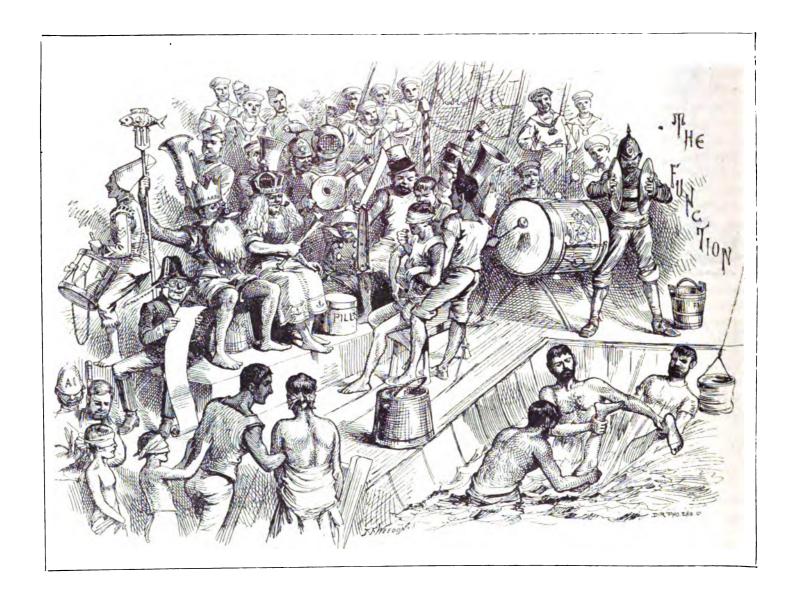
Then follow the other stewards and cooks. Strange to say, none of these individuals (though some of them must have been many years at sea) have ever crossed the line before; or, at any rate, if they have, Neptune's people will not believe them, and they are all treated as if they had not, and any gentle attentions which they may have shown, in the shape of scraps and pickings from the galley, seem to have been forgotten, or are ignored by the ungrateful sailors, who take a special pleasure in persecuting them. The barber's assistant lathers them all over; the barber himself leans heavily on them with his ponderous twohanded razor; the doctor (Neptune's doctor) finds from their pulse and their general appearance that the climate



One I should like to teach to dance on

has not agreed with them, and that they are so much out of condition as to require several of his largest pills. The bears in the tank naturally find that it takes a long time and a great deal of salt water to purify them after this treatment. Then after the cooks and stewards come the marines, so as to make sure that none of these shall get off during the hurry-scurry which is sure to take place towards the end of the business. Neptune's people have a very heavy job on this occasion, a large majority of the

ship's company having never crossed the line before; nevertheless, with all the expedition they can use, a considerable number of the ordinary seamen and boys get off altogether, for the "pipe to dinner" calls "all hands" to more serious business.



## ARMOURED DEFENCES FOR INFANTRY.

(Translation from the Rivista di Artiglieria e Genio.)



HE Dutch military authorities have devoted much attention during the last few years to the necessity of protecting maritime forts against the artillery of an invading army. Since the year 1882 they have constructed armoured

defences capable, it is believed, of offering adequate shelter at least against the field artillery of a hostile army. The accompanying diagrams will show the general construction of these defences; while the following brief description may serve to explain points not at once apparent.

One or more metal plates (A) are supported by two of more cast iron posts (B). The armour plates are inclined at an angle of 29°, and are each pierced by four loopholes for musketry fire. The upper portion of the defence consists of a mass of cement and mortar about one metre in thickness. The supporting posts are provided with struts imbedded in the rear wall. The interior of these defences can either be adjusted to stationary fortifications, or can be so constructed that they may easily be moved elsewhere if required.

The resistance offered by these works to guns of various calibre was practically tested in 1882 and 1883 by the Dutch authorities, who instituted a series of experiments at Scheveningen. In these trials the target was a defence of the above description. On this occasion there were two plates and three posts, whilst a stout wooden rampart was substituted for the usual rear wall. (Figures 1A and 2A).

The two armour-plates were of equal size, and had each a thickness of ten cm. In 1882 wrought iron was used; but the results were by no means so favourable as expected. In the experiments of 1883, therefore, Creusot's steel plates were employed in their stead. With this exception, the conditions were the same in both years.

In the experiments of 1882 (see Figures 3A and 4A) an 8 cm. gun was first tried, and the results were as follow:—

The left plate was struck by nineteen projectiles, of which ten penetrated. Seven of the ten, however, struck the plate in spots already injured by preceding shots, whilst one shot entered a loophole. The right plate was struck fourteen times, thrice in places already damaged. Ten shots failed to pierce the plate. In all, the two plates received thirty-three shots, of which but three penetrated.

In experimenting with a 10.5 cm, gun the two plates were struck in all thirteen times. Nine of the shots penetrated the plates. Of this number five were real hits, three struck spots already damaged, and one entered a loophole.

But one shot was fired from a 12 cm. gun, and that completely penetrated the armour.

The centre post was struck eighteen times by the 8 cm. and eleven times by the 10.5 cm. gun; and it was found that of these hits two of the former and three of the latter were "straight on." At the eleventh shot the post showed a number of small fissures; but it was not destroyed until nineteen more shots had been fired. Five of the latter were from the 10.5 cm. gun. The projectiles did not produce holes of more than ten mm. in depth. The left-hand post was struck by two projectiles from the 8 cm., and by one from the 10.5 cm. gun. No serious effect was produced in either case.

To sum up the results of these experiments, considering only those shots that struck intact portions of the plates the following percentage penetrated:—

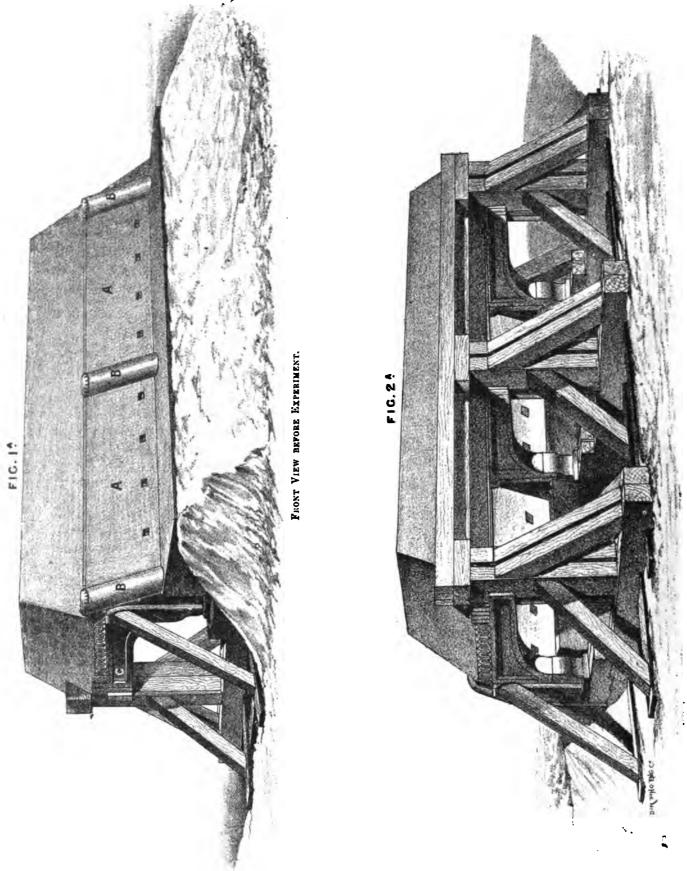
In the experiments of 1883 the left plate was struck thrice by the 8 cm. gun steel projectiles, without being perforated. The only result of these shots was a fissure in the armour about five cm. deep, and from twenty to twenty-five cm. long. The right plate received three shots, of which two produced cavities from seven cm. to eight cm. in depth, and one penetrated the target. The success of the latter shot, however, was accounted for by the fact that it struck the plate very close to a spot damaged by preceding projectiles.

The inner face of the plates presented, after experimenting with this gun, a number of small inequalities or bulges, but no visible fissure.

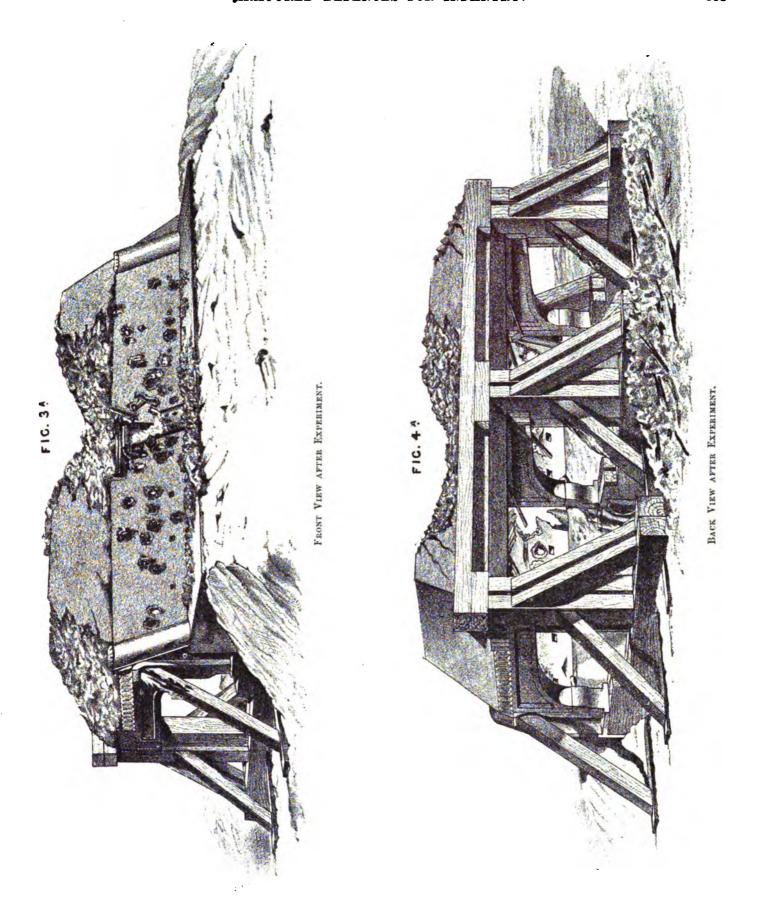
In the experiments with a 10.5 cm. gun, each plate was struck six times; but the only practical result was a roughening of the inner face of the armour by holes of from 2.5 cm. to 7 cm. in depth.

In experimenting with a 12 cm. gun, the left plate was hit by six projectiles, of which two struck within a very small distance of one another, without, however, causing any perforation. At the seventeenth shot, which was made with a flat-headed projectile, a fissure was noticed at the right hand lower corner of the plate, visible both from the exterior and interior. In consequence of this fissure the twentieth shot knocked away a portion of the armour-plating.

The right-hand plate received six shots from the 12 cm, gun. Two projectiles perforated the armour, causing serious rents in its face. One of the shots produced a



BACK VIRW BEFORE EXPERIMENT.



fissure running horizontally across the plate, the other divided the lower portion of the plate into two parts.

In both these experiments, it may be mentioned—not only those shots that pierced the whole of the armour, but also those which produced fissures on its inner face, were counted as penetrating.

In the first experiments, sixty-eight shots were fired from the 8 cm. gun, thirty-three from the 10.5 cm. and five from the 12 cm. Though they struck the mass of cement and mortar protecting the top of the defence and made a considerable breach therein, they failed to destroy it completely. The interior was damaged by the shots that had penetrated the armour-plates.

These experiments, it may be remarked, were instituted rather to gauge the respective resistance offered by wroughtiron and steel armour than to determine the attacking powers of the different projectiles.

In a few experiments held in 1884, the same plates and posts were used, resting this time on a brickwork foundation, and surmounted with a covering of mortar and cement. The central post, though struck by eight projectiles, was but little damaged. The shots failed to produce any considerable cavities in the posts. They did most damage in the interstices between the posts and the armour-plates; but even there they did not succeed in effectually separating the two.

As the result of these tests, the Experimental Commission submitted the following conclusions and deductions to the Dutch military authorities:—

Neither the wrought-iron nor the steel plates experimented upon have a sufficient power of resistance at a distance of 500 metres. Under circumstances more favourable, both as regards the distance and weight of the attacking artillery, the interior construction of these defences offers, on the whole, a safe and convenient protection.

As regards the respective resistance of steel and wroughtiron plates, the result of the later was directly contrary to that of the earlier experiments. The resisting power of steel plates, it was found, was greater than that of any other armour; but one serious drawback existed to their adoption. Though the projectiles seldom completely perforated the armour, fissures or cracks were easily made even by guns of small calibre; and in the event of the shot being doubled, as was often found to be the case, serious damage to the defence ensued. The Experimental Commission, therefore, recommended the adoption of wrought-iron plates of adequate thickness. In the experiments of 1882 it will be remembered the wrought-iron armour was ten cm. thick; but this was found almost useless as against guns of more than eight cm. It is consequently suggested that for defences likely to be assailed by field artillery, the armour should be fifteen cm. thick; while, against 12 cm. guns, twenty cm. armour was considered sufficient.

Steel projectiles are found to be the most efficacious; while those with flat heads have the greatest effect against the cast-iron posts.

The Commission further suggested that the armourplates should have an inclination of from twenty-nine to thirty-five degrees.

The Dutch military administration have decided definitely to adopt the recommendations and suggestions advanced by the Commission; and have contracted with the firm of Gruson for the cast-iron posts to be used in the construction of these defences.

The fifteen cm. armour plates are to be employed chiefly or exclusively against disembarking troops, in which case the attacking artillery is unlikely to exceed, on the whole, a calibre of nine cm. The defences whose armour is to be twenty cm. in thickness are designed for the protection of inland localities exceptionally liable to attack from an invading army.

It is also proposed to adopt similar plans for the protection of permanent batteries. Defences of the above description are to be constructed at the extreme point of the Rhine delta on the frontiers of Holland and Germany. The defences are in this case to protect a battery; and at this most important strategic position both the weight of the guns and the quality of the armour will of course be exceptional.

In this new plan the struts (c) will be substituted by thick vertical walls provided with wide doors of communication.

# A WHALING STORY (TRUE).



H yes, sir! No doubt you naval men look down upon the merchant seamen, but I tell you there's no real call for it, and I maintain there's many a one with a true brave heart that sails under the 'Red rag,' as ever marched agin' a foe or sailed to death under the white ensign."

So spoke my old friend the life-boat keeper at M——, with whom, whilst on half-pay and waiting an appointment to go on active service again, I used to wile away many an hour in listening to his more than usually interesting stories of whaling life in a Southseaman.

It is one of these stories that I propose to give here, taken word for word from his own mouth; for, in order not to be wrong about any of the terms used, or to misplace names, I took it down in short-hand as he spoke, which fact seemed to give the old man grim satisfaction.

He was one of the old school of seamen, now rapidly passing away, if they have not altogether disappeared since England ceased to send her fleet of whalers to the south seas in pursuit of sperm whales.

"Well, sir, it was a good sight of a time ago; I was a deal younger in those days."

May be you've heard tell of the barque Fish Hawk? No? Well, she made something of a noise in the shipping world about twenty five years agone. Captain Roberts—his name was good for a full ship, and men would take a smaller lay to go with him, than a bigger one and sail with most of them. He never had no difficulty about getting hands, and good ones at that; no "green ones" for him, but all tried men.

It was in 1854 she fitted out at Shields to go sperm whaling. The owners came out in style! Well, they fitted her out by the captn.'s order; that is, you see, sir, leaving the "old man" free to obtain what he thinks best, and no stint. As to that, you know, stint won't do in a whaler; it's either keep the men's health up, or else no oil and a big loss of money. We were fitted out for three years, as I say, in a first-rate manner, and away we went. Sailed on the 25th of January.

Jack Hold was first mate, and I was second. We had always been together since the time we served 'prentisship. But he got the weather side o'me in having his brains stowed closer than mine—no shifting ballast like, you see.

I could work a day's work and take a meridian altitude, but I stuck at that; yet I was considered a good whaler and knew my duty on board as well as in the boats.

Captain Roberts was an old friend of ours and we'd sailed with him twice before; but then Jack and me was like brothers afore, and we'd just been made brothers in church—leastways so they told me—through Jack's a-splicing my sister, but I didn't seem to féel any fonder of him than before; p'raps I couldn't.

This was to be our last voyage, so he said; he just wanted to make up enough money to buy himself a tidy little farm and lay up on shore, and we reckoned this trip would do it. I was to live with them until I got tied up too, for I was "gamming" with a neat little craft about that time as I hoped to make "my missus" when we came back. You see in them days, and with a captain like our old man, money was made fast. Jack I reckon had a good bit laid by, and I hadn't done so very badly neither.

I wish we had stayed where we was, I do; but then, you see, we can't always tell, can we?

I ain't a going to bother you with telling how our luck ran for the first two years we were out; but, taking the rough with the smooth, we did fairly well, and had stowed down upwards of 1,000 barrels of oil.

As I told you, we had no "green hands," and every man knew his duty. I must say I was mighty pleased with the way they all worked; but it was mainly owing to the "old man," for all hands said it was a pleasure to sail with the likes of him. And as for Jack Hold, I don't think there was a man on board had a bad word for him; not but what he was sharp on the "lads" when needful, but he knew his duty, and that makes a sight o' difference, you know. Then, you see, sir, he wasn't one of them kind of men one meets with in some ships, as used their boots instead of the two fists God gave them to use. No! he would and could use them latter if need be, and the men knowing it, seldom gave him any call; for he was slow to get angry -mostly got his way by kind words. The captain, too, stood by him through thick and thin, which isn't the way of some, who treat their "chiefs" worse than any one aboard; but that's nothing to do with what I'm telling you.

We was just to the north-east of New Britain and had sighted New Guinea the day before. A fine bold coast it was too—a bit to the nor ard of Cape King William, I think, and we had come east under easy sail till we had the French islands some miles away astern of us.

About noon we sailed right up to a whale "sleek" which you know, sir, is the grassy-looking track they leave in the water.

I thought I had smelt whales for some time before, but couldn't feel sure, as the south-east monsoon was blowing pretty fresh all the day, tho' it fell a'most calm at nights. This was about June, in the year 1856—(the old fellow was very precise about his dates, as most seamen are).

Well, when the captain saw the sleek he hove the barque

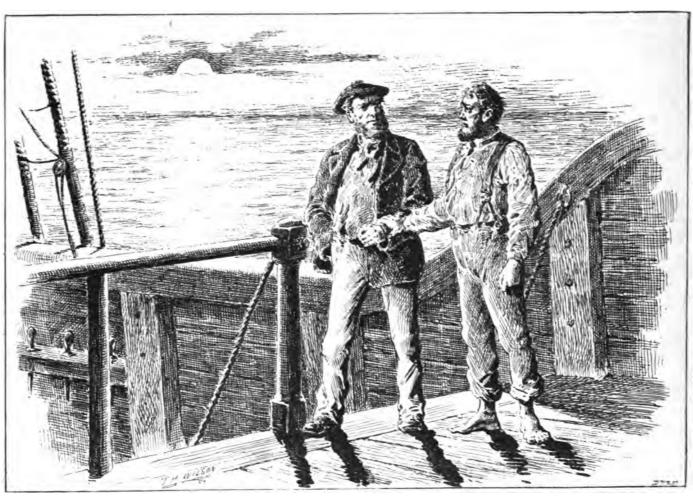
to, as we felt sure the whales wasn't far off; but we didn't sight them that day, tho' we saw several whale birds about, which is a sure sign of whales close to.

Pretty little things whale birds, sir! I suppose you must have seen plenty? p'raps, tho', without taking much notice of them—about the size of a dove, light slate colour on the head, wings and back, but underneath it is white; blue legs and black beady eyes. You see, we whalers notice all these things, because we are alone so long at a time with nature over the great sea.

I had the middle watch that night—the captain he'd kept

About two o'clock, I was leaning over the rail, at the break of the poop, thinking about the folks in England. It was a lovely night, not much of a moon, but the stars were shining as they only do shine in the tropics; no wind to speak of, but just a warm breath of air off the island, enough to keep the little sail we had set asleep. The air was heavy with the scent of flowers, the water was still, all save a lapping agin the bow like a murmur.

Far away on the starboard beam I could see the light of a volcano blazing up and dying out, just like a huge lighthouse.



JACK HOLD'S FOREBODING.

the first with the third mate; not that it was usual for the captain to take a watch, but we were expecting whales, so he preferred to be about. Jack had the morning watch. The boats had the line-tubs—and lantern kegs in everything, in fact, ready for lowering, except the harpoons and bom guns: we never put them in till the last minute.

The captain had left orders to be called at daybreak and to have a "look-out" in the crow's-nest the first thing.

You see, sir, I remember that night well; I have good cause to remember it too.

Just then Jack comes along the deck with his feet bare, so that I didn't hear him till he touched me on the shoulder.

I ain't naturally a scarey man, but somehow I jumped with a kind of queer feeling, especially when I see Jack looking as white as a ghost.

He hadn't been seeming very well for a long time, kind of dumpy like, but I had laughed at him and told him to take a dose of physic; but this night he looked real bad. So I said, "What's the matter, old man? it isn't eight bells yet, only just gone four."

"I know that," says he, and catches hold of my arm all of a tremble: "Jim, I've had an awful dream."

Well, sir, I burst out laughing.

"Don't laugh, Jim."

There was that in his voice as made me silent.

"I didn't think much of it the first night, but then it came again last night, and to-night again it was awful. I can't explain to you what it is, but it means that my time is short. If anything happens to me, you will look out for the wife and the little one I have never seen? Promise me, Jim."

"Be sure I will," says I; "but what's likely to happen to you? You've got a touch of fever, man, or eaten something that's gone wrong; just take a glass of stiff grog and a dough-nut now, and you'll feel as right as a trivet."

I spoke as cheery as might be, but there was a big lump in my throat.

I called my boat-steerer, and told him I was going below for a minute. Went down and mixed Jack a strong glass of rum: "Now," says I, "just turn in again."

"No," says he, "I'll just come on deck and stay with you till eight bells."

He seemed awful scared, and as if he couldn't shake it off in spite of the grog.

When we got on deck again he began to talk wild like, first about being smashed by a whale, and then his money (in his will he had left his all to his wife as trustee, with me, for his child), and that sort of talk as I thought was mere light-headedness at the time; I did my best to turn his mind, but it was no use.

When eight bells went, I called the watch and went below, first giving Jack's boat-steerer a hint that he wasn't very well.

Now mind you, sir, Jack was no coward, nor was he a nervous man, but one who flinched at nothing where courage was wanted, always the first on to a whale and that without fluster or heat, which showed he had a cool head, for it takes a steady nerve for a boat-header to lay his harpooner just right on to a fighting whale, or even an eighty-barrel bull.

Well, I hadn't been long turned in, and might have slept an hour or so, when I was roused by a cry from the "lookout," "She blows!" I wasn't long getting on deck, you may be sure, and there they was, spouting and breaking all round the ship, making the white water fly, as they peaked flukes and leapt hump high from the water.

It was a large school—nigh upon fifty whales. "Cachalots" the wise heads call them, and "catch a lot" was just what we meant to try for. There was just light enough to see them plainly, for the dawn was breaking.

The Fish Hawk lowered four boats, with a couple of spare ones on the skids.

My boat hung from the port-quarter davits, the mate's from the starboard.

My harpooner had everything in readiness for a start; 'tis always a race to see which boat can get away first.

Soon we were off, making straight for a seventy-barrel that was going along easy, "head out."

I kept on a four-point course with his eye, so as not to galley him. Sperm whales, for all their size, are mighty easy frightened.

We had a fair wind, so up went the sail, oars a-peak, going about six knots, I reckon.

Now I don't believe there is one person in a million ever knows the excitement a whaling man feels going alongside a whale; 'tis like sailing right up to death and jamming an iron into it. Yet a whale may be worth a heap of money to those that tackle him; on the other hand, one clip of his flukes may send them to eternity before they could even cry to God for mercy.

It may be that you feel something like it, sir, when in a "torpedo boat" tackling an enemy's ironclad, though mostly you wouldn't make much profit out of that, I reckon; but you might perhaps run the risk of meeting with as quick an ending, for I don't suppose there is much to choose between a blow from a double shell, or the flukes of a sperm whale.

We came right up to the whale just as he was settling down, that is, sinking without peaking his flukes or making a fuss—they don't stop under long when they sound in that way; however we were just in time for the harpooner to give him one iron, which went home.

"Back all, boys, for your lives!" You should have seen the way them lads handled their oars, for it was life and death work getting clear of him.

When he felt the iron, he didn't sound quite so easy as he first intended; up went his tail, and down again with a clap like thunder, covering the boat with spray and foam; it would have been a bad lookout for any boat that was under those mighty flukes just then, it would had made toothpicks of her.

Out goes the first tub of line, without a check, sparks were flying off the logger head like as if it was on fire, had to keep pouring water on to it to save charring the line. We bent on a drogue, which is a square piece of wood, you know, with a becket fast through the centre of it, to bend on to the line; this is to stop the whale's way through the water.

I went forrard and took the bom gun, ready to give him a bom lance as soon as we could haul near enough.

He had taken out two hundred and fifty fathoms of line, or thereabouts, before he rose again to spout.

There was many entries in the log-book of the Fish Hawk with flukes marked upright against 'em, which means whales taken, but this one was the largest of any the boats had tackled during the voyage, so we were most anxious to settle him quick with a bom lance in his life, for fear he should break away and escape us.

Lord, sir! while I'm a talking to you, as it might be

the boat was a-flying through the water at about eight or ten knots, no sign of the monster we was fast to above water either, he was "travelling under."

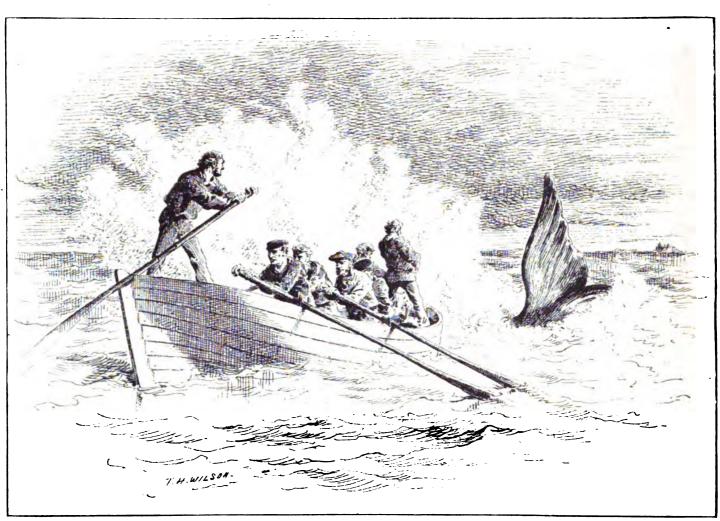
The waves were rising on each side higher than the gun'wal of the boat,—by a couple of feet, but she didn't ship any water owing to her travelling so fast.

Presently he rose to spout, being exhausted with staying under so long.

Now was my time, and I began to haul in the line, which was coiled into the tubs as fast as I could get it in by the other "hands." Just as I was getting the drogue

I was warned and on the look-out for this one, and paid out as fast as I could, but just as the line was going clear of the loose whale, the one we was fast to starts off again, and tautened the line right across the other's mouth; she wasn't more than forty yards ahead of the boat.

I sung out to the harpooner to lay the boat round with steer oar against the strain, but bless you, she was like a fly on a mill stream. When the line was struck round she flew till I thought nothing could save her being capsized; she was laying over gunwale under, and the water was pouring in.



THE WHALE'S DEATH FLURRY.

aboard, my harpooner, who was at the steer oar, sung out that there was a loose whale, making right across our track.

Now you know, sir, that often means danger, as mayhap the loose whale fouls the line, and as often as not snaps it; or if not that, gets fast entangled, so that there are two whales on the line instead of one.

Whales is very knowing, and it's my belief trys to help one another that way, and more often than not succeeds in breaking the line. I was just going to cut the line, which I was very loth to do, when she righted; we were off again, both whales making in the same direction.

You see the line had got entangled in the second whale's mouth, which is not so uncommon a thing as you might think.

However it was no child's play, fast to them two whales, and going through the water like a race horse; it was real splendid. I don't think I ever travelled so fast at sea, before or since.

It was a great strain on the boat, but she was first-rate, and stood up to it as if she knowed what was going on.

It didn't last long; soon the pace slackened and I got in the loose line as quick as ever I could, and so hauled up within about twenty yards of the nearest whale. Then I gave it a bom lance just about the middle of the hump, right for the life.

Meanwhile the first whale sounded again and whether it was that or the death flurry of the other I don't know, but the line came clear.

However, it didn't sound for long, but took us off again, past the second whale, which was now spouting thick blood and we knew she was safe for the try pots, so left her for one of the other boats to pick up and tow back to the ship.

Our friend ahead was getting a bit more feeble so we got in the slack line and came up with him hand over fist.

Now it's no easy job to steady your aim in a boat going about five knots in a lumpy sea, it wants a lot of practice; but if a man jambs one leg against the thigh board and leans well on the other, he can generally succeed in getting a lance pretty nigh the whale's life, which lies under the centre of the hump.

It is quickest to haul close up, but it ain't by any means the safest.

I was excited by the morning's work and hauled up a bit too close, any how it caused a sad accident.

I got within ten yards of that seventy barrels of oil before I fired; when I did so he stopped short as it were, which let the boat go ahead before the lads could back off.

Up went the flukes, I sort of felt what was coming, dropt the bom gun and plunged overboard. The other lads were sitting at their oars, but the harpooner was standing up at the steer oar and the flukes hit him full, and he went up about forty feet in the air, dropping in the water almost thirty yards off, and sunk like a stone. He must have been smashed to a jelly.

The other lads were not touched, owing to their being seated. I grieved for that man; he had steered my boat for three voyages and was a right smart hand, poor fellow.

I was soon back in the boat, then I learned what had happened, for I didn't see anything of it myself, being under water when the clip came.

Well, sir, there was no more to be done but just wait till the whale died; he didn't do that easy either, but rushed here and there, breaching half out of water then bringing his flukes in the air and down again with a smash that sent the white water flying all round.

To make sure in case he wanted a second lance to finish him, I put another charge in the bom gun; but he didn't, for soon the big waves around were red with the great beast's life-blood, which he threw up from his spout hole in great streams—what we call "spouting thick blood."

It does seem a'most a pity to take such a grand creature's life, don't it? But then we must have money and others must have light.

Soon the spouts grow feebler and come with a hard labouring sort of noise, and the whale lies on the water quiet, though trembling with pain and loss of blood. Once more his flukes go up with a mighty effort, then fall with a force that makes the boat shake from stem to stern though some distance off; 'tis his last struggle for life and the whale falls over on his side dead, with the red sea washing against him just like a breakwater.

At once the sharks are swarming around the dead carcase; it's strange where them ugly customers come from, yet they seem to know the minute a whale is dead, and then the thrashers, or "killers" as we call them, they turn up for their share.

There don't seem to be many people as knows much about them creatures, that is to say, the way they kills a whale. You see a whale must breathe, which she does through her spout hole. Now these "killers?" know that as well as we do, and when a whale comes up to spout one of 'em makes a rush and comes right over her spout hole, there it stops in spite of the whale trying to shake it off, and she has to sound again without breathing. Every time she comes up, on one goes, till the whale is dead beat and opens her mouth, when in they go and eat her tongue.

Bless you! the sperm whale has a lot of enemies besides man for all her size; and she pretty often gets the worst of it.

It didn't take us long, as soon as the whale was dead, to make a line fast and begin towing him to the ship, which was coming up under easy sail.

Now all the time that the whale was alive, I hadn't given a thought to Jack—I was too busy; but whilst we were towing back I thought about him and his dream and it made me kind of anxious. I took my glasses and had a look round to see if his boat was anywhere in sight; I soon made it out fast to the first whale we had killed, but I couldn't rightly tell whether he was in her or not, so I handed the glass to one of the men to take a look, and he couldn't make him out neither.

The ship bore down to us first, as we were the furthest to wind'ard. We were soon alongside and the whale fast astern of the ship, along with another, killed by the third mate's boat.

I was so anxious to learn about Jack that I was soon up the side, first telling one of the men to sling the bom gun and harpoons for hoisting on board; it was the duty of the boat-steerer to see to the drawing of the charges and the slinging of the spare harpoons (we always get them aboard first thing, in case of accidents), but he was gone, poor fellow, and I ought to have seen to it myself. I have sorrowed for that mistake all my life, God knows.

When I got on deck, there was Jack seeing to the reeving of the cutting in tackle. I was that glad I shook him by the hand and said, "How about the dream now? I told you it was all gammon and vapours."

"Hush," said he, shaking his head. "So, poor Tom's gone (my boat-steerer)! poor fellow, he have his 'lay' paid him above. You go and get a glass of something to drink; you've done pretty well to-day for whales. The 'old man' wouldn't let me leave the ship; said I wasn't well, and took my boat himself. But there, go and get your grog my boy, you look as if you needed it, and don't bother about your boat, I'll see her cleared and hoisted."

I went below, got my glass of spirits and a biscuit, told the steward to give my boat's crew a glass a piece when they came up, and went on deck; the captain was alongbom with the fuse in it, which was alight, and tugged with all my force to get it out, but I couldn't stir it.

Jack hadn't loosened his hold of the rigging, but had sort of sunk on his knees on the rail; just then he seemed to come to himself again.

"Go away, Jim; drop astern in the boat there," said he, as calm as if he were putting the ship about; "one of you men come and take the second mate away," for I was still tugging at the bom lance.

"It's no use, Jim," says he, "when this goes off, it will kill you as well as me. I want you to comfort my wife



THE DEATH OF JACK HOLD.

side in the mate's boat and the third whale was towing astern.

The barque was lying to, main-top sail a-back, Jack was standing on the rail holding on to the after shroud of the main rigging, and one of the men was hauling up a line alongside of him, fast to something out of my boat, I couldn't see what. Just as he got it up to the rail I heard a loud report and knew it was the bom gun, which I had left charged. O God! sir, the lance had gone right through Jack's thigh and into his body. He gave a great groan, I rushed to him and caught hold of the tail piece of the

and take care of my little one, teach it to say 'Father.'"

I think one of the men must have dragged me off, but I can't remember.

"Good-bye, Jim," he said again, "my dream was true. Good-bye, Captain Roberts. Good-bye, lads! Stano back! God have mercy!"

And then, sir, he was gone—the bom had burst! There was a sob in the old man's voice as he ended.

J. LOYWOOD.



# GENERAL CHARLES GORDON,

ROYAL ENGINEERS,

KILLED AT KHARTOUM, SOUDAN.

A BRITISH HERO

## GENERAL CHARLES GORDON.

## IN REMEMBRANCE.



HE fate of one of the greatest Englishmen the history of this country will ever honourably mention, has alike shocked and aroused the warmest sympathy of civilised communities throughout the world. When the

deeds of the great and good of this nation in these our days, are recorded by the impartial writer of historical events, then the splendid actions of Charles Gordon, the heroic defender of Khartoum, will shine out as examples for every British-born subject to follow without reproach or fear.

Much, but not too much, has been written of late concerning Charles Gordon, the courageous, the self-sacrificing British officer. His praises have been the theme on which abler hands than mine have dilated with soul-inspiring eloquence. Men of the greatest power and ability as writers, have dwelt upon Gordon's deeds and upon his magnificent character, in terms that I am quite unable to imitate. To these powerful writers I leave the record of his fame. This has been—it is—absolutely safe in their faithful trust. Little remains for me to say, concerning the gallant gentleman who has just departed from the scene of his heroic labours to a better world. I will only venture to place on paper my humble record of "Charley" Gordon as I knew him "when a boy."

"The boy is father to the man" is a trite yet true remark. Yes, Charley Gordon and I were boys together, born, brought up, and educated in the garrison town of Woolwich. His father and mine, were officers in the same gallant regiment whose motto is "Ubique"—the Royal Artillery. Our fathers were on very friendly terms; each had a high respect for the other, for both had many characteristics in common; both were excellent artillerists, and both had the interests of their regiment deeply at heart. And it came about that Charley Gordon ultimately passed through my father's hands at the Royal Military Academy.

Gordon and myself were not educated at the same school. Yet as officers' sons of the same garrison, we were frequently together in all the youthful pastimes of our daily

lives. He was quiet, thoughtful, earnest, and very undemonstrative. He did not possess the exuberance of spirits which animated most of his young companions. While they were at cricket, football, or other athletic amusements, Charley Gordon watched their actions with a quiet smile upon his face, approving often in low and gentle tones. How shall I describe him? I will try to do so, though my pen should fail me.

Charley Gordon as a youth, was slim of build, like all his brothers. His features were regular and very pleasing. His eyes were of a remarkably clear blue: so serious, so very earnest, and so full of thought. They were not keen eyes; they were what is called "full." They looked at one straight in the face always, and with an honest, fearless, yet almost sad expression. His mouth was of a decisive mould, yet his lips were never firmly compressed. His forehead was broad, expansive; the lower part of his face, as a youth, was rather narrow. As he grew in years, and as heavy responsibilities came thickly on him, this part of his features grew broader and more His hair was nut-brown in colour, in texture fine, and was slightly waved. He always appeared to me to be a little stooping about the shoulders. This was not really the case. The fact was, he carried his head as if in thought, the chin drooping towards the breast, but the eyes always looking steadily to his front in a thoughtful, almost dreamy way. His voice was low and soft. The pronunciation of his words was clear and distinct. Charley Gordon did not talk much. He would listen calmly to all the conversation around him, and would occasionally venture a quiet remark that was scarcely ever attended to by the companions of his early years. These youths of superior physical power to Charley Gordon, regarded him as "rather a duffer," he was so different to them all. So very unobtrusive was Gordon, that all the officers' sons with whom he associated, thought he would never make a mark in life. How much have we been mistaken! How he has passed us all in life's great race, and how gloriously he has died-the pride of all his countrymen, the admired of all the world!

I remember saying to my father during Gordon's youthful

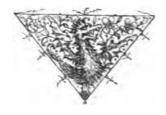
career at the Royal Military Academy, "I don't think Charley Gordon will get through—do you?" "Don't make a mistake," was my father's reply; "you don't know Charley as well as I do. I have watched him carefully all the time he has been here; he is a quiet fellow, but he is working very hard, and it would not surprise me if he comes out well at the head of the list for commissions and gets the Engineers." I expressed my doubts concerning this opinion, but my father, who well knew every Gentleman Cadet's personal character and the probable place he would occupy in the list of those who passed for commissions, was right. Gordon did pass out as foreshadowed, and well has he since borne out the opinion of him expressed by an older head than mine. And this head is still older now, and white with snowy hair that proves the passing of over eighty years of life. former youthful protégé has gone before him. many of the youthful friends of former years of active military life, have gone before this aged officer; yes, have died as Charley Gordon has, bravely fighting for their country's honour, in their country's battles. I, too, knew them all right well. Do I not remember the sorrow I felt when war, a terrible war in the Crimea, took away two of these friends of my early years? Handsome Roderick Dew, slain by a Russian round shot, which took off his head while laying a gun of his battery at the battle of the Alma. Little Freddy Walsham too, killed at the same gun while ramming home a shot in place of gunner No. 2, after springing from his horse when he saw the man drop dead. The roll is a long one, of my boyhood's and young manhood's friends who have won a worthy name and then been killed in battle, since the day of Alma. The name of Charley Gordon is now added to this roll of fame. The great deeds he has done, have far surpassed the actions of those I knew in former years, and who surrendered their lives bravely in their country's service far away from England. Charley Gordon, the quiet, the most unlikely, has proved himself the best, the highest honoured of us all.

He was religious—thoroughly so. His duty was to his God, and to his Queen and country. Her Majesty has lost in him a good and faithful soldier, the nation has surrendered the worthiest of its sons.

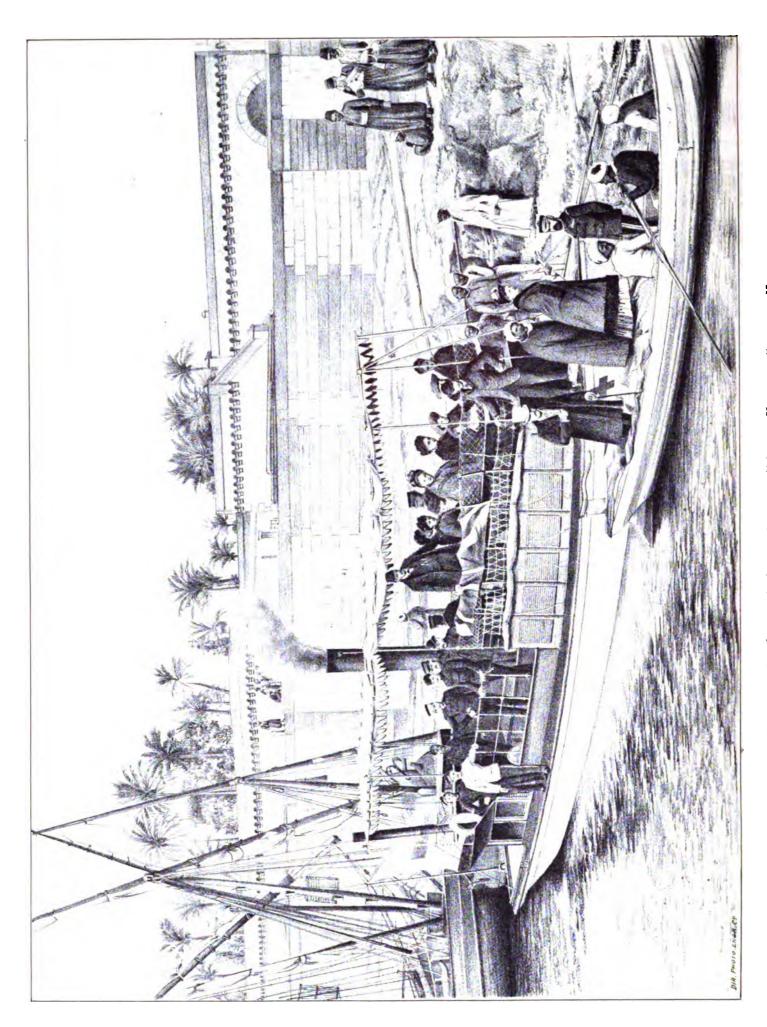
He chose the alternative of an honourable death in preference to the dishonour by which he would have stained the nation's name through leaving to their fate, the city of Khartoum's unfortunate inhabitants whom he was sent to save. He is now at final rest, after a life of almost unceasing activity, of astonishing success.

The historians of his grateful country will write in glowing words, of Gordon's great and gallant deeds. In the temple of fame, a niche will be found, in which "Charles Gordon, the hero of Khartoum" will be affixed in lustrous letters of imperishable nature, to remind all future generations that one more noble-minded Englishman, did sacrifice his life while gloriously carrying out his faithful duty.

EDITOR.



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THE NATIONAL AID SOCIETY'S STEAM LAUNCH, "QUEEN VICTORIA," ON THE NILE.

# STEAM LAUNCH "QUEEN VICTORIA."

BELONGING TO THE NATIONAL SOCIETY FOR AID TO THE SICK AND WOUNDED IN WAR, EMPLOYED WITH THE NILE EXPEDITIONARY FORCES.



HE National Society for Aid to the Sick and Wounded in War on October 22nd, 1884, despatched to Egypt as its Special Commissioner Assistant-Commissary-General J. S. Young to carry out the objects of the Society in connection with the Nile

expeditionary forces.

The Nile is, as is well known, the line of communications for the force under the command of Lord Wolseley for operations against Khartoum, and the difficulties of transport have often been depicted by the pencils of several artists.

These difficulties, even on the lower stretches of the river, increase every day, as the Nile will continue to fall daily until May or June next.

The National Aid Society has therefore been fortunate in acquiring a steam launch which draws only two feet six inches of water, and which can steam five to six miles an hour against the stream.

The ceremony of christening the launch the Queen Victoria, after our most gracious sovereign the Queen, patroness of the Society, was performed at Cairo on January 10th by Lady Baring, in the presence of Sir Evelyn Baring, Lieut.-General Sir Frederick Stephenson, K.C.B., Surgeon-General Irvine, principal medical officer, Colonel Ardagh, C.B., commandant of the base of operations, and a distinguished party.

The launch will ply on the Nile under the superintendence of Mr. Young, and under the medical charge of Mr. E. F. White, F.R.C.S., of St. Thomas's Hospital.

The aid to be rendered will take the form of transporting on the upward journeys comforts for the use of the patients in hospitals on the line of communications, and on the downward journeys conveying invalids, for whom there is every requisite provided on board the launch by the Society in equipment, medicines, cooking arrangements, and medical comforts, which forethought can devise for the efficient treatment and care of sick or wounded men. The Queen Victoria is fifty-eight and a half feet long, nine feet beam, has two cabins in which there is sleeping accommodation for seven persons, and is fitted with the "Willans" patent engines. The service of the launch has been accepted by Lord Wolseley as "a most welcome and valuable contribution to the comfort and welfare of the force under his command, especially at low Nile."

The staff of the launch consists, in addition to Surgeon White, of Mr. Jesse Dale of Mansourah, superintendent and engineer, one pilot, two boatmen, a fireman, a cook, and an attendant,

During the past week the National Society has again been in communication with Lord Wolseley and with the authorities at home, and it is now equipping an expedition which will go to Souakim under the charge of Mr. V. Barrington Kennett, as their representative in that district, with a staff of surgeons and a liberal supply of comforts and medical appliances. The intention is to form stations for the relief of sick and wounded men along the lines of communications. In this the Society is acting in entire accordance with the advice of Dr. Crawford, the Director-General of the Army Medical Department. The unlimited command of funds possessed by Government, enables provision to be made on the most liberal scale for all medical requirements; but nevertheless it is found that the agents and medical officers of the National Aid Society, being untrammelled by the necessarily somewhat stringent Government regulations, have frequent opportunities of intervening usefully and efficiently, and of supplying those deficiencies which cannot fail to arise in even the best organized service. The experience of the Society is, that the most satisfactory work it has accomplished on previous occasions, has been done by judicious representatives acting on its behalf at the seat of war; with freedom of action, and working in friendly accordance with the Medical Department of the army. Personal extra aid can thus be promptly and efficiently given, and comforts and luxuries, which contribute very greatly to the well-doing of the sick and wounded, can be supplied and administered by persons on the spot who can step in at an opportune moment. It is not the province of any voluntary Society to attempt rivalship with Government, or to seek to relieve it of any portion of its duties and responsibilities. The work of the National Aid Society is of a supplemental character, capable of extension and development in seasons of emergency when the strain of unforeseen circumstances may prove greater than the power of ordinary resources can deal with. The National Aid Society does not at present propose making any public appeal for funds, as it has at its disposal a considerable balance still remaining from previous subscriptions. But should the present campaign continue for a lengthened period, and should the work consequently expand and further funds be needed to carry on that work, the Society will not hesitate to appeal to the public, feeling sure of a ready response from the people of England when called upon to aid towards alleviating the sufferings of those gallant troops who are upholding the honour of our country in a distant land, and under circumstances of peculiar trial and difficulty.

## THE DECORATION OF "THE ROYAL RED CROSS."

## MRS. GEORGE KING (SISTER JANET).



ORN in London, the daughter of Benjamin Wells, A.R.A.M., this lady, Janet Helen, when but eighteen years of age, deeply interested by the tale of suffering of the warriors in the struggle between Servian independence and

Turkish supremacy, determined to join the ranks in the new crusade. Voluntarily leaving home, society, friends, pleasure, and all that makes up the brightness of a young girl's life; impelled by a high sense of duty, she entered the Protestant Deaconesses' Institution to be trained in the arduous routine of nurse to the sick and wounded in Becoming quickly proficient, she was selected to form one of a party of nine sent by the Institution to assist in nursing the troops engaged in the war between Russia and Turkey. The Sisters proceeded to Bucharest under orders to the Russian National Red Cross Society, and were there directed to join the army of the Cesarewitch, operating on the Lom. Leaving the railway at Fratesti, the journey was performed in rough carts to Semnitza; the Danube was crossed by the bridge of boats to Sistora, and the party waited there for an escort to Vardin. Sistora was decimated by typhus, and was, moreover, crowded with wounded from Plevna, and the Sisters consequently found plenty to occupy them whilst waiting.

The escort having at last been provided, the Sisters started on their journey in country carts. Snow lay deep on the ground, the party lost its way, and the night was passed in the open carts, bitter cold and the howling of wolves effectually preventing sleep. Arriving at Vardin they found their services sorely needed, and for the long and dreary winter months the Sisters worked day by day from early morn till late at night. To Sister Janet's care were allotted some two hundred patients who lay in huts scattered here and there amongst the hills. Daily as she trudged through the snow from hut to hut on her mission of mercy, she was exposed to attacks from the wild dogs which infest Bulgaria. More than once these brutes, their mouths reeking with human blood, had her down, but her stick and dagger protected her until her cries brought assistance. Twice she was savagely attacked by Bashi - Bazouk patients. Communication across the Danube was stopped; coarse black bread was the sole diet; there was no news from home; and there was additional cause for disquietude in rumours of impending war with England.

Eventually, the army of Sulieman Pacha having been crushed and driven on Rustchuk, the Sisters were ordered there. The journey was a terrible one; half of them were down with typhus. Emaciated and nigh worn out, Sister Janet found her little remaining strength severely taxed in nursing her companions, so that on the capitulation of Rustchuk with the close of the war, she returned to England justly nominated for her devoted services, to receive the decoration of the Imperial Order of the Red Cross of Russia.

Having subsequently been appointed superintendent of the hospital at Newcastle-on-Tyne, Sister Janet was selected by the Stafford House Committee, to join the party under Surgeon-General Ross for service during the Zulu War, the "National Society for Aid to the Sick and Wounded in War" having elected on this occasion to take no action. Journeying from Durban to Utrecht, the Boer driver managed to overturn the country cart on to its occupants, and Sister Janet happily escaped with a sprained arm and various bruises. At Utrecht 3,200 sick and wounded passed through her hands. Several of her patients were Zulus, who, at first violently resisting, became grateful on finding that they were to be gently tended, instead of being tortured as they expected, and showed their gratitude by crawling to meet her as she approached their huts, kissing her dress, and greeting her with repeated "Moushla!" On Sir Garnet Wolseley visiting the hospital at Utrecht, he personally thanked Sister Janet for her care and attention to the patients, and at his subsequently expressed wish, she proceeded to Standerton for service with the Sekukuni expedition, but this being abandoned for the season, she was sent to Landman's Drift in order to nurse Captain Hardy, A.D.C., who, however, died before her The self-sacrificing and thoughtful care of Surgeon-General Ross, and the kind and courteous attention received from all hands, made the Zulu campaign a very different experience from that of Bulgaria.

She was awarded the South African medal, and received the Decoration of the Royal Red Cross from the Queen for "the special devotion and competency displayed in nursing duties with her Majesty's troops."

Thus honourably closing her useful career as the Red Cross "Sister Janet," she now fulfils woman's mission as a devoted wife and mother.

CHARLES J. BURGESS.





MRS GEORGE KING (SISTER JANET.)

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## THE SERVICE CLUBS.

## III.—THE ARMY AND NAVY CLUB.



HIS well-known Service Club was established in the year 1837, by Sir Edward Barnes and a few officers just retired from service in India, who, finding from the large number of candidates on the list of the Junior United Service Club,

how little chance there was of a young officer being enabled to join any military club for some years, proposed to establish an "Army Club," to which all officers on full or half-pay of Her Majesty's army should be eligible.

His Grace the Duke of Wellington on being applied to, declined to become either patron or member, unless it was opened in a similar manner to the navy and marines, which suggestion being acted upon, His Grace at once consented to become patron, and at the commencement of 1838 the Army and Navy Club was opened at the corner of King Street, St. James's Square. The first President was Sir Edward Barnes, who died in 1838 and was succeeded by Admiral Sir Philip Durham who died in 1845.

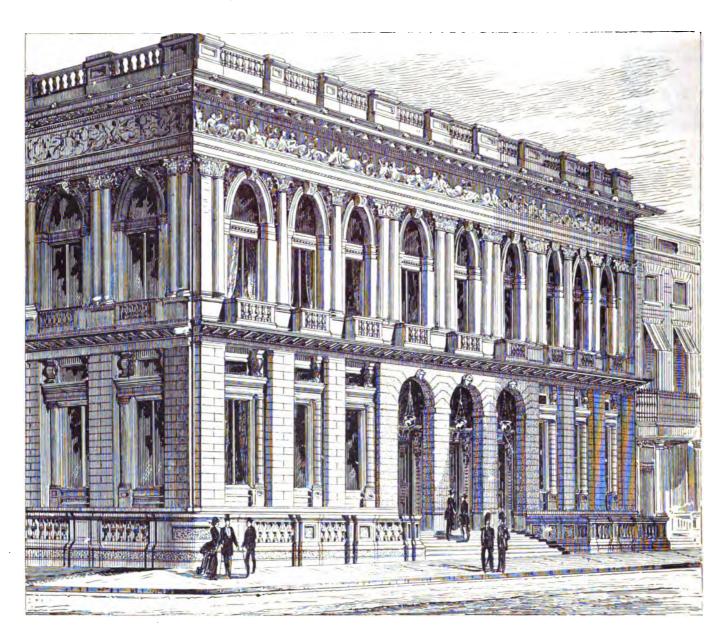
On the demise of the admiral, His Royal Highness the late Duke of Cambridge, on the application of the Committee, enrolled himself as a member, and accepted the Presidency of the Club, and at his death was succeeded by his son F.M. H.R.H. the Duke of Cambridge, K.G. The club at this period had just completed the purchase of its present freehold site, having a frontage in Pall Mall of 80 feet, of 100 feet in St. James's Square, with 200 feet in depth, at an expense which, together with excavations, concrete, &c., amounted to £52,000; the cost of building the house was £54,000, and of furnishing £10,000, making a total of £116,000. During the building of the new Club House, the members occupied No. 13, St. James's Square, known as Lichfield House. The first stone of the new building was laid on the 13th May, 1848, by Colonel Daniell, Coldstream Guards, and the Club was thrown open for the use of its members on the 25th February, 1851. Members are elected by ballot in club meeting. Thirty members must actually vote, and one black ball in ten excludes. The entrance fee is £40; subscription, £7 7s. for old members; but the following resolution was carried at the annual meeting of the club on the 3rd June, 1878: "All new members who are elected to the club, commencing with the next ballot, shall pay an annual subscription of

£10 10s." It is worthy of note that this was the first military club wherein the admission of friends was permitted. The rules of the club are well and carefully drawn up with a view to maintain its honour and dignity; and Rule xli. which we do not remember to have seen before in any club, might be introduced with advantage into many others. It is as follows:—"No member of the club shall allow his name with the address of the club attached thereto, to appear in any prospectus of any public company of which he may be a director or an officer." Unlike the United Service or the Junior, officers of all ranks are eligible to become members, and we find admirals and midshipmen, lieutenant-generals and ensigns associated together in agreeable harmony, although officers of H.M. Indian Forces are not admitted. The illustration of the club is taken from Old and New London. This club was designed by Parnell and Smith. The exterior is a combination from Sansovino's Palazzo (the picture from which the club was designed is in the House Dining Room No. 12), Cornaro and Library of St. Mark's, at Venice, but varying in the upper part, which has Corinthian columns, with windows resembling arcades filling up the intercolumns, and over their arched heading are groups of naval and military symbols, weapons and defensive armour -very picturesque. The frieze has also effective groups symbolic of the Army and Navy. The cornice, likewise very bold, is crowned by a massive balustrade. The basement from the Cornaro is rusticated, the entrance being in the centre of the east, or George Street front, by three open arches similar in character to those in the Strand front of Somerset House, the whole is extremely rich in ornamental detail. In the Entrance Hall there is a fine bust of H.R.H. the Duke of Cambridge by Count Gleichen, and in the Inner Hall, a colossal bust of the Duke of Wellington, and a marble bust on pedestal of H.R.H. the Princess of Wales, presented by Admiral Arthur Cumming, C.B.

The Memorial Window was erected in 1853 and is very beautiful in design. It records the names and dates of the Battles that have occurred since the establishment of the new Club, together with the names of those Officers—members of the Club—who have been killed in action. The inscription at the base of the window is as follows:—
"In honour of those Members of the Army and Navy Club who have fallen in the service of their country."

The Coffee Room, eighty-two feet by thirty-seven feet, is panelled with scagliola, and the ceiling is enriched with flowers and pierced for ventilation by heated flues above, The walls are adorned with portraits of the Dukes of York and Clarence by Hoppnler, also of Lord Raglan, Lord Nelson and many others. In this room there has been established a buffet, the first of the kind in Service Clubs, where Members can have a "stand-up" lunch. Adjoining

portrait of Lady Hamilton, besides many other pictures. In the Smoking Room, which is luxuriously fitted up, are many interesting pictures and engravings—and one may be specially mentioned, that of Nell Gwynne by Sir Peter Lely, which hangs above a looking glass that belonged to her. The magnificent stone Staircase that leads to the Library and evening rooms, is adorned with the portrait of Her Majesty, busts of the Royal Family, and a valuable piece of Gobelin



is a room lighted by a glazed plafond; next is the House Dining Room decorated in the Munich style, and in which will be found portraits of many distinguished officers, and a pair of "sporting scenes" painted and presented by Captain C. F. Webster Wedderburne; and more superb is the Morning Room, which looks on to Pall Mall, with its arched windows and mirrors forming arcades and vistas innumerable. In the Visitors' Dining Room there is a miniature

Tapestry—the sacrifice of Diana—presented to the Club in 1849 by Prince Louis Napoleon who was an Honorary member. The Drawing Room and Visitors' Drawing Room are splendid apartments, furnished with taste and elegance and contain many interesting pictures, engravings, and objets d'art. The Library will bear favourable comparison with those of other clubs, the bookcases, panelling, &c., are made of satin-wood.

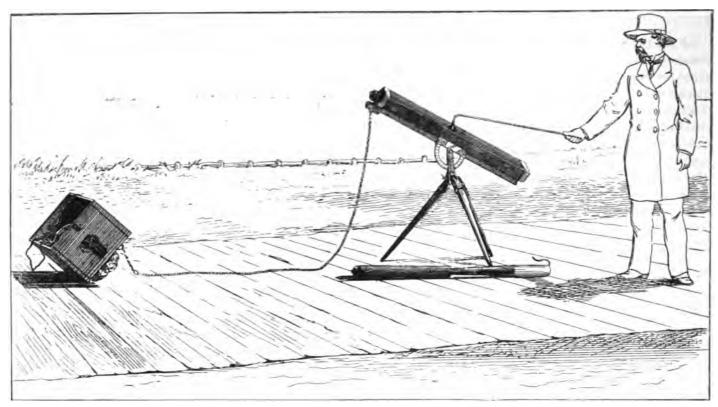
In the third storey are Billiard and Card Rooms, and a Smoking Room with a lofty dome elaborately decorated in traceried moresque. In one of the passages to Billiard Rooms and Card Room is a picture that is very suggestive, Fatshan Creek—the Raleigh's gig sinking and the crew disabled. What an interesting picture might be painted of this ship! Her gallant commander, Keppel, ordering a royal salute to be fired at the moment of her sinking; and the likenesses of the officers—all of whom have done the State good service since, while the majority have attained distinction. Montagu and Stephenson, Prince Leinigen and Lord Charles Scott formed part of the crew of the Raleigh, or, as she was then called, "The House of Lords."

The arrangements for cooking could not possibly be better. The kitchen—where all the mysteries of the culinary art are practised—is large and well ventilated, and how many joints may be roasted simultaneously, may be inferred that at the time of our visit the servants' dinner was being prepared—there were sixteen joints

down and certainly room for as many more. A separate part is set aside for the preparation of vegetables, and the confectionery and pastry department is carried on in another room. The tea and coffee department is in another part of the basement, and it is no uncommon thing to send up 150 breakfasts. The great strain on the kitchen is due to the fact that the majority of the members dine at 8 P.M. The Committee meet every Friday, and nothing that can contribute to the comfort of the Members is overlooked. How much their efforts are appreciated by the Members, could not be better illustrated than by the fact that the Army and Navy Club always has its full number of members, 2,350—that as vacancies occur they are at once filled up-and that the members all strive to keep up that esprit and goodfellowship one with the other, which are the best practical illustrations of the motto of the Club "Unitate Fortior."

> JAMES C. DICKINSON, Retired Staff Surgeon.





RUSSIAN LIFE-SAVING ROCKET APPARATUS.

#### LIFE-SAVING ROCKET APPARATUS.



LTHOUGH, as its title denotes, this Magazine is devoted to subjects connected with the Naval and Military forces of the British Empire, and to subjects which will afford information respecting the armies and navies of

foreign powers, it will always be my pleasurable duty to insert matter of interest to general readers.

I have recently selected a subject which I feel sure will meet with the approval of many of the Public. This is, the means by which life may be saved when storm-beaten ships are cast upon dangerous shoals or rocks within reach of land, and when there is present some apparatus by which they may be communicated with.

Surrounded as Great Britain is by "the sad sea waves" that are often lashed to tremendous fury by the terrible storms which sweep across the broad Atlantic, or burst upon the land by the cruel blasts of the Northern Seas, it is imperatively necessary to use every means that the British people can devise, to save the lives of those who are in danger of perishing when wrecked upon our coasts. No efforts have been spared up to the present time with this object, by those of the British people who have taken upon themselves the duty of protecting or saving life at sea. It may be said with truth, that owing to the necessity which has been forced upon the British people by the extent of their coast-line, and to the fact

that their insular position compels them to meet storms by sea from east, west, north, or south, or, rather, from whichever quarter the wind may blow, they regard the saving of life from wrecked vessels as a first duty to sea-going humanity. It cannot possibly be denied that Great Britain ranks foremost in all the means by which the crews or passengers of storm-beaten ships may be relieved of peril, or saved from death by drowning. We have our noble National Lifeboat Institution with its many splendid boats. manned with hardy and courageous fishermen inured to storms, and having no fear of the fierce howling winds or of the towering furious waves which threaten to engulf them at every instant while on their errand of salvationan Institution supported by the monetary and other gifts of those whose feelings prompt them to contribute towards the saving of life at sea. These humane givers can have no worthier motive; their money cannot be better bestowed.

We have, in another way, our Royal Humane Society, principally established for the encouragement of and reward for individual acts of bravery in the endeavour to save the lives of drowning men or women, also chiefly supported by voluntary contributions. Other smaller societies are in operation in Great Britain; and all are engaged in the cause of preserving life from the destroying action of that which is yet necessary to our existence, water.

Other countries are engaged in the same cause; each

according to the length of its line of sea-coast or the extent of its rivers. Each has followed the bent of its own ideas in this particular direction. The object being the same with all, general principles govern the means by which the saving of life at sea may be effected. The construction of apparatus is, in general principles, very similar. The details of this construction and of its action are, however, different with nearly every country engaged in the task.

Our admirable cousins, the Americans, have deeply studied the whole subject, and have practically endeavoured to ascertain the means by which several of the greatest of the European Powers save the lives of their shipwrecked mariners. The American Ordnance Board has carried out a series of exhaustive experiments with the Rocket Lifesaving Apparatus of these Powers, including, of course, that of Great Britain. It is by the courtesy of the American Ordnance Board that I am able to render the details of construction of the Rocket Life-saving apparati experimented with. I shall proceed to give these descriptions to my readers with a twofold pleasure, on account of the noble aims of the whole subject, and because a grand and growing English-speaking community has afforded me the power of rendering them.

It will be clear to my readers that the American people are as deeply interested in this noble subject as the English nation. "Blood is thicker than water." There will be, I hope and trust, a strong tie of thought and feeling between this country and America, as long as the two countries remain upon the face of the globe.

The first Rocket Life-saving Apparatus tried by the American Ordnance Board was the Russian. I therefore render a description of this apparatus in the present month's issue, and will follow on with that of Germany, and of two appertaining to Great Britain.

EDITOR.

#### REPORT OF THE CHIEF OF ORDNANCE.

# USSIAN LIFE-SAVING APPARATUS.

#### DESCRIPTION.

THE Russian life-saving rocket is made of sheet iron, about one-tenth (0"1) of an inch in thickness. The body is a cylindrical tube, closed at the front end by a metallic head, held in position by four short screws.

The rear end is closed by a diaphragm, which is perforated by six vents or fuse holes, equidistant circumferentially, whose centres are on the circumference of a circle concentric with the diaphragm.

An axial hole in the diaphragm has a female screw thread cut on its interior surface to engage the male thread on the rocket stick. The body is fastened to the perforated disk by crimping and by short iron pins. The cylinder is filled with rocket composition.

The construction of the rocket stick is shown in Fig. 4, Plate II. The body of the stick is made of light wood, cylindrical near the base and tapering to the front, forming the frustum of a cone. The front end of the stick, which screws into the rocket, is made of wrought iron, hollow at its base for the insertion of the wooden body. The latter is held in place by screws. The rear end of the body is rounded, and on one side carries a strong iron hook, about five (5") inches in length, with its point turned towards the front, and curved slightly outwards from the axis of the stick.

A curved steel spring is placed between the point of the hook and the shank strap to prevent the egress of the ring of the rocket chain after firing. This hook is bolted to the wooden body of the rocket stick, as shown in the figure.

When prepared for packing, the rocket sticks are screwed into the rockets and the fuse holes or vents are covered by disks of water-proof tarred cloth.

The diameter of the disk is enough larger than that of the rocket to admit of its being folded over the end of the rocket and secured by several turns of twine, tied tightly around it

The whole rocket, except the wooden body, is then treated with a coat of black paint.

The cap or disk must be cut away before firing, in order to expose the fuse holes.

#### 2.—PRINCIPAL DIMENSIONS, WEIGHTS, ETC.

	Length Exterior diameter Interior diameter					Inches. 25·25	meters.
Rocket body	Exterior diameter					3.2	8.13
	Interior diameter					8.0	7.62
Total length of rocket					69.08		
Total length of rocket stick						29.2	74.16
Total length of rocket and stick .						55.5	140.97
Length filled with composition .						23.1	58.67
Maximum diameter of stick					2.8	7:11	
Diameter of vents or fuse holes .						9.0	1.52
Number of ve	ents, six.						
Average weigh	ht of rocket and sti	cl	ζ			Pounds. 25.5	Kilo- grames, 11:56

For detailed dimensions and method of construction, see Plates II. and III.

#### 3.—PACKING.

The rockets, with sticks attached, are packed in boxes containing five each. The boxes are very heavy, and are made of 2-inch plank.

Clamps are placed at each end of the box, and are notched to fit the rockets. A strip of felt is placed along the edge of each clamp above and below the rocket.

The lid has two hinges on one side so that the box may be opened, the rockets used, and the box refilled. Screws hold the top securely to the sides in transportation.

An annealed iron wire passed through the side and top of the box on the edge opposite the hinges, has the ends drawn together and held firmly by a leaded seal put on by the inspecting officers of the Imperial Russian Government. This prevents tampering with the contents without detection. The seal bears the date of packing (1876).

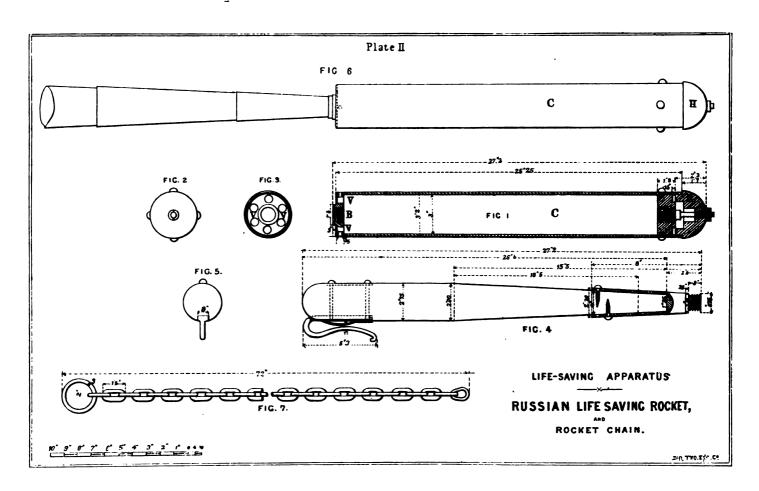
The boxes were covered with coarse felt an inch or

These flanges are 1".7 wide, and have a space half an inch wide between them throughout their length.

The space between the flanges serves as a channel for the grappling hook on the under side of the rocket-stick to slide in when the rocket is fired.

It is also necessary for the same purpose in placing the rocket in position before firing.

The rear end of the square tube is bound and strengthened by a band of strap iron 2" wide and one-tenth (0".1) of an inch thick.



more in thickness, over which was a wrapping of gunny sacks and matting; the whole firmly bound with hemp cordage.

# II.—RUSSIAN LIFE-SAVING ROCKET STAND.

#### 1.-DESCRIPTION.

This stand is a rectangular tube of sheet-iron mounted upon a wooden tripod. The cross-section of the tube is a square with one of its diagonals situated in a vertical plane when the stand is in position for use. This hollow parallelopipedonal tube is formed from a single piece of sheet-iron. The longitudinal faces forming the lower edge do not join to complete the regular figure, except for two (2") inches at the lower end, but are bent outward from each other, forming two parallel flanges, Figs. 1 and 4

The front end of the tube is reinforced in a similar manner, but with this difference: The band at its lower edge has a cylindrical tube (Figs. 1, 2) 1".7 in diameter projecting to the front 2".3, for the purpose of holding the ring of the rocket chain.

This short tube embraces the front ends of the flanges of the body, and has a longitudinal slot, corresponding in width to the space between the flanges along its upper surface to permit the passage of the rocket hook.

A rectangular notch 1"·1 deep is cut in the lower side to accommodate the upper link of the rocket chain when the ring is placed over the projecting tube.

Near the middle of the longitudinal bottom flange on the right-hand side of the body tube is attached a rectangular brass plate, 10" long and 1".6 wide, with a lug and eye-hole projecting from its under edge near the middle. Through this eye-hole passes the horizontal axis.

In a corresponding position on the left-side is a semicircular brass plate attached to the other flange. The arc of this plate is graduated into degrees, in order to indicate the elevation of the axis of the main tube.

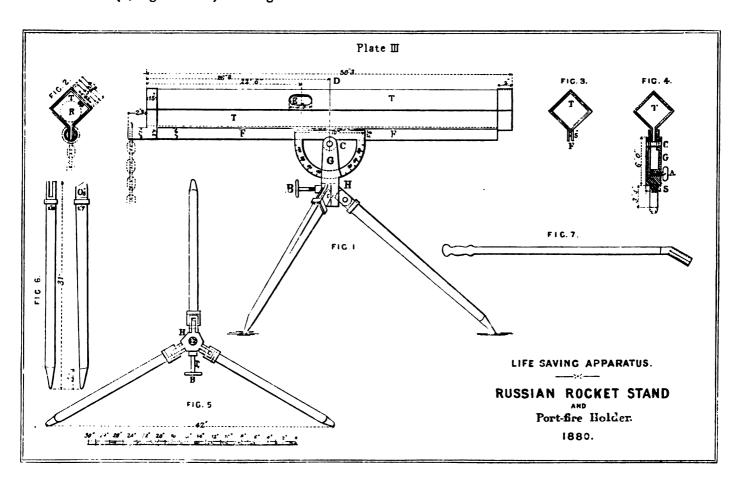
A lug and eye-hole at the centre of this arc admits of the insertion of the horizontal axis.

A slotted brass support (G, Figs. 1 and 4) with holes pierced through the upper ends of the vertical arms sustains the horizontal axis (C, Figs. 1 and 4) that carries the rocket tube (T, Figs. 1 and 4) and its graduated arc.

in form, with narrow longitudinal projections, or lugs, on the alternate faces for the attachment of the legs.

These projections are 120° apart. Opposite one of them is a rectangular seat through which the clamp screw (B, Fig. 5) passes that controls the motion in azimuth and the limited vertical motion of the support and its superincumbent weight.

The head is pierced longitudinally by an axial hole for the reception of the tenon of the support. The legs are made of wood, shod at their lower ends with pointed iron shoes, and encircled by narrow iron bands near their upper extremities.



A clamp screw (A, Fig. 4) passes through this support from the right side and clamps the arc in any given position. All motion in altitude within the limits of the scale is governed by this screw. The lower end of the support (G, Fig. 4) terminates in a cylindrical tenon 3"2 in length and 1"2 in diameter, which fits in a corresponding hole in the tripod head (H, Fig. 5).

A shoulder (S, Fig. 4) on the support rests upon the top of the tripod-head when the clamp screw (B, Figs. 1 and 5) is loosened.

The tripod (Fig. 5) is composed of a head (H), three legs and a clamp screw (B).

The head is of brass. This piece is a hexagonal prism

The upper ends of the legs are slotted vertically to receive the projections on the *head*, to which they are fastened by iron pins.

Two elliptical openings (E, Figs. 1 and 2), opposite to each other, are made in the upper sides of the tube for the insertion of the port-fire to ignite the rocket composition.

#### 2.—PRINCIPAL DIMENSIONS, WEIGHTS, ETC.

Total length of rocket-tube	 Inches. 53.3	Centi- meters 135:38
Cross-section, square Exterior	 4.3	10.92
Cross-section, square / Interior	4.1	10:41

# THE ILLUSTRATED NAVAL AND MILITARY MAGAZINE.

Weight of rocket stand			Pounds. 39·0		Kilo- grams. 17:69
Weight of rocket chain					2·17
Weight of port-fire handle			0.5625		0.52
Total weight without packing box			44.1875	=	20.13
Weight of coil of rocket line	_		62 <b>D</b>		28.12

For other details, see Plate III.

#### 3.—PACKING CASE FOR ROCKET STAND.

The rocket stand and port-fire holder are securely packed in a long box with a hinged lid, closed by a hasp. This box has a handle at each end for convenience of transportation.

#### 4.—DIMENSIONS AND WEIGHT.

Exterior dimensious of box for rocket stand-	Inches.	Centi- meters.
Length	69.0	175.26
Width	16.375	41.65
Depth	9.5	24.13
Total weight of box and stand	Pounds. 99	Kilo- grams. 44.09
Weight of packing box	60	27.21

#### III.—PORT-FIRE HOLDER.

# (Plate III. Fig. 7.)

A port-fire holder or firing staff accompanies the rocket stand. It is a simple wooden handle with a bent head of brass. The brass head is hollow and is slitted on the sides so as to form a rude clamp. The port-fire is inserted in the split end of the head and then ignited in the usual manner.

# IV.—ROCKET CHAIN.

#### (Plate II. Fig. 7.)

This is a hand-made iron chain, six (6') feet in length, terminated at one end by a ring two (2") inches in diameter. The ring is placed over the tubular projection on the front end of the rocket stand in firing. The other end of the chain is fastened to the end of the rocket line.

#### V.—ROCKET LINE.

This is a loosely-twisted hemp line about the size of the No. 8 or No. 9 service lines. The Russian method of coiling or faking the line is unknown, as no instructions were received with the apparatus.

#### VI.—METHOD OF USING.

The rocket stand is taken from the box, the legs of the tripod extended, and the stand placed at the firing-point. The index being clamped at zero on the graduated arc, the tripod is levelled by the eye by making the axis of the rocket tube horizontal. This can only be done approximately; then loosen the lower clamp screw and swing the stand around until it points in the desired direction. Clamp the vertical spindle and by turning the upper clamp screw to the left the required elevation may be given; after which the screw must be tightened, in order to retain the tube in place. Take a rocket from its box, tear off the cap over the vents, insert the rocket, base first, into the rectangular tube with the hook on the stick gliding down between the flanges on the lower side of the tube. When the hook strikes the band at the lower end of the rocket tube, the rocket is in position for firing. Place the fakes or faking-box in front of the stand, put the ring of the chain over the cylindrical tubular projection on the front end of the stand, letting the chain attached to the line hang below. Stand clear of the line, and, with a port-fire inserted in the holder, advance and ignite the rocket by thrusting the port-fire gently through one of the elliptical openings in the rocket tube. Care must be taken not to disturb the aim.

#### VII.—Action.

An instant after the composition in the base of the rocket is ignited, the latter leaps forward, guided by the rocket tube, and as it leaves the tube the hook engages the ring of the chain attached to the line and carries out the chain and line.

The chain should be fastened to the line in advance before it is wanted for use.



# A SUBSTITUTE FOR COMPULSORY SERVICE.



N every way, the state of the army under the short-service system, and consequently the state of preparation of the country against the risk of invasion and disaster. has long occupied the minds of thoughtful men with much anxiety. The necessity for an efficient army is admitted, and if England is to be in the position of the strong man armed, she must have a reliable force not only to send abroad, but to take charge of the defence of home.

The want of a homogeneous whole for these purposes, engenders that feeling of insecurity which has so often resulted in panics, such as the one which brought

the now present volunteer force into existence twenty-five years ago.

It must be remembered that our silver streak is not so formidable an obstacle as in former times, to the landing of an invading army. The result of such a catastrophe would now be very much more serious, as London is incapable of defence.

In the article on Short Service in the last number of this magazine, various suggestions were made for popularising the army and for fitting the men who pass back into civil life for employment. In Germany the army is looked up to, according to Captain White, because every one has to enter the naval or military service of his country, and all the respectable parts of the population are compelled to join one service or the other.

In this country, no one in power has the courage to say that this example must be followed, though all admit that our present means of defence are both expensive for what is provided, and are unsatisfactory.

The volunteer movement has to a great extent strengthened our position, although, from no fault of the volunteers, the force is not so well organised as it ought to be.

One great result of the movement has been overlooked, this is, that the volunteers have proved that Englishmen can be trained as most efficient soldiers without any perceptible interference with their civil life and duties.

If this is admitted, surely the problem of efficient home defence is solved.

Now that education is compulsory and the principle is recognised that every boy has to pass a certain educational standard, why cannot the same principle be carried further, and the man be compelled to finish his education by learning to bear arms in defence of his country?

If the militia ballot were enforced on all between the age of twenty and thirty, the only exemption being, say seven years' efficient service in the volunteers, there would be no lack of members for the latter force.

When the volunteers were first enrolled, it was expected that the middle classes would be reached, and would serve in the ranks. This indeed was the case at first, but gradually as the fashion and novelty died out, and the capitation grant came in, the status of most volunteer corps changed, and a lower class has been enrolled; the upper middle class supplying officers, but otherwise giving up altogether their share of duty, except in comparatively few instances where crack corps attract to their ranks some of the more enthusiastic men. This should not be; and if it is true, as is so constantly stated by those who should know, that volunteers when well drilled are as good as the average of the line, there is no reason why every Englishman should not be compelled to reach this state of efficiency.

Where is the hardship, and what are the difficulties in the way, and what would be the cost of this plan?

The hardship—practically none. If a young man wished to avoid serving in the militia, he would readily pay the expense of being a volunteer. He could serve part of his time even while at college, or if he had to go abroad, he could leave his term of service until his return.

The difficulties of course are many, but not insuperable. It will first be said that this is compulsory service, and that the volunteer organisation is proclaimed to be a failure—admitted, as far as the fact that it has failed to make the great bulk of the middle classes serve for the first intended purpose; but not admitted, in the sense that it has conclusively proved in England that compulsory service, like compulsory education, can be enforced without hardship to civilians. The next question which might be asked, would be: Why not do away with the volunteers and enforce the Militia Act pure and simple? As well attempt to mix oil and water! You cannot expect the well-educated class to rub shoulders with Billingsgate; and there is every

reason on the score of economy for keeping the militia and volunteers separate.

Let the former be for the poorer class, and let the training be as now, for a fortnight or three weeks' continuous service—the latter for those who can afford the necessary expense, and who are willing to do so, to avoid mixing with the rougher elements and also to avoid the continuous service. The cost, certainly should not be excessive. The volunteers should, to a great extent, be self-supporting, and men would be quite willing to pay the expense of their uniforms, and a sufficient annual subscription for the privilege of belonging to the force. Masters of respectable workmen, would also naturally contribute towards their expenses, in order to retain their services by serving in the volunteers instead of in the militia.

By making the volunteers to the greatest possible extent self-supporting, through the subscriptions of their members, the most part of the capitation grant would be saved.

The Government should, however, secure rifle ranges from being interfered with, and should give facilities for providing others, as the want of sufficient accommodation in this respect in the neighbourhood of large towns is very great.

This short essay is not intended to go into details, but merely to bring forward a principle by which the army could be popularised and increased, for there are many points which would have to be settled in carrying out the scheme; one, for example, is the qualification for officers of the volunteers, and the inducements to be offered to gentlemen who are willing to qualify themselves. At present the chief difference between officers of the regular army and the reserve forces, is, that while the first are paid for their services the latter have to pay! This at least should be rectified.

If such a scheme were carried out, surely we should hear no more of the Queen's uniform being looked down upon, or of young men saying it is too much trouble, and beneath their dignity, forsooth, to join the ranks of the volunteers And further, the fact that every man had to pass through some military training would induce many to volunteer into the army for service abroad at all times, and on the occasion of such a national disaster as the present, would give an infinite number to draw from, and as a moral weapon would make England's power and weight felt with treble effect.

Where every man is a soldier, there is no fear of the ordinary soldier being looked down upon because he wears Her Majesty's uniform; neither would there be any difficulty in men obtaining civil service when passed from the army into the reserve, as here again the prejudice against men who have done their duty would be overcome—a prejudice which arises to a great extent from the fact that it is supposed our present voluntary system does not get respectable men into the ranks, but on the contrary, only those who as a rule are not steady enough for civil employment.

A VOLUNTEER FIELD OFFICER.



# MILITARY BIOGRAPHY.

# MAJOR-GENERAL, SIR HERBERT STEWART, K.C.B., &c.



In the unbroken series of successes which has attended Lord Wolseley's military career, nothing is more noteworthy than the judgment and discretion which he has always displayed in making choice of his lieutenants. Napoleon and Wellington were remarkable for their knowledge of character and instinctive perception of latent talent, and they seldom made a mistake in the selection of their subordinates. This military insight seems throughout history, to have been of itself one of the most distinctive attributes of a great commander; and to the excellent discrimination with which Lord Wolseley has invariably chosen his staff is due, in no small measure, his unvaried successes Envy, hatred and much uncharitableness have been freely vented against what is termed the Mutual Admiration Society, but in the ranks of this so-called association, appear the names of Sir Archibald Alison, Sir Evelyn Wood, Sir Gerald Graham, Sir Redvers Buller and last, but not least Sir Herbert Stewart. Surely this "admiration" is not a co-operative quantity, supplied by the members of this supposed charmed circle to be shared solely among themselves. Does not the voice of the nation say that the above celebrities have one and all done great and doughty deeds and are capable of greater? With Guiderius in Cymbeline, be it said

> Let us bury, And not protract with admiration what Is now due debt.

"General Stewart's operations have been most creditable to him as a commander, and the nation has every reason to be proud of the gallantry and splendid spirit displayed by Her Majesty's soldiers on this occasion."

So telegraphed Lord Wolseley, after the battle of Abu Klea, and the next gazette announced that Major and

Colonel Sir Herbert Stewart, K.C.B., was appointed Major-General in the army for distinguished service in the field.

Meanwhile, Sir Herbert Stewart had approached within six miles of Metemmeh, where the Arabs mustered in force sufficient to threaten his advance. Halting on a ridge of desert within four miles of the Nile, he said to his staff, "We will breakfast first and then go out to fight." In less than ten minutes the Arabs were not only all over our front and flanks, but had drawn a line around our rear. Groups bearing the fantastic Koran-inscribed banners of the False Prophet, occupied vantage points all round. Breakfast preparations were peremptorily suspended; fatigue parties, cutting mimosa bushes, strengthened our position, and during these operations while going towards a low mound, a hundred yards to our right front, General Stewart was severely wounded.

Telegraphing the result of the engagement, Lord Wolseley said respecting Sir Herbert Stewart:—"The temporary deprivation of his services I regard as a national loss. He is one of the ablest soldiers and dashing commanders I have ever known. I recommend him most strongly to the Queen for Her Majesty's most favourable consideration."

Sir Herbert Stewart was born 20th June, 1843, son of the late Reverend Edward Stewart, who was grandson of the seventh Earl of Galloway. His mother was a daughter of the well-known Mr. C. J. Herbert of Muckross. Co. Kerry. Sir Herbert was educated at Winchester College, where he became a famous athlete, and his prowess at cricket is to this day a household word amongst the alumni of that memorable institution. He entered the army 24th November, 1863, as ensign in the Hampshire Regiment, (37th foot), obtained his lieutenancy July, 1865, and acted as adjutant to his regiment, until promoted to captain, April 1868. His first commission was by purchase, as were his two succeeding steps.

Sir Herbert Stewart was a living instance of the fallacy which supposes that a beau sabreur must necessarily be a species of Centaur or one born in the "pig-skin." He, together with Baker Pasha and Sir Redvers Buller, graduated in the infantry. Baker served regimentally in the Ceylon Rifles, while Buller's first commission was in the 60th Rifles. Yet they one and all turned out brilliant cavalry leaders, and wholly upset the above long-cherished theory. Herbert Stewart exchanged to the (Prince of Wales's) 3rd Dragoon Guards as captain in 1873. He served as brigade-major of cavalry in the Zulu war of 1879 and was present at the engagement of Erzungayan Hill, and subsequently to the breaking up of the cavalry brigade, was specially employed on the lines of communication. He was mentioned in Colonel Russell's report and received the brevet of major in the same year.

The Zulu war over, Sir Herbert served as principal staff

officer to the Transvaal Field force in the operations against Sekukuni and subsequently became military secretary and chief of the staff to Sir Garnet Wolseley. For his services he obtained the brevet of Lieut.-Colonel, July, 1880, the medal with clasp, and in despatches Sir Garnet Wolseley said, "Colonel Herbert is one of the best staff officers I have known, and one whom I feel it will be well in the interest of the army to promote." Afterwards he became Assistant-Adjutant, and Q.M.G. in South Africa, where he took part in the Boer war, and was again mentioned in despatches.

In the following year Sir Herbert Stewart serving on the staff in Ireland, was ordered to Egypt as Assistant-Adjutant and Q.M.G., of the cavalry division, and was present at the engagements of El-Magfar, Tel-el Mahuta, the two actions at Kassassin, the battle of Tel-el-Kebir and the capture of Cairo. For these distinguished services he was mentioned in despatches, made A.D.C., and C.B., received the medal with clasp for the campaign, the third class of the Osmanieh and Khedive's star.

After Tel-el-Kebir, Major-General Drury-Lowe in command of the cavalry was ordered on to Cairo. At noon on 14th September, mosques and minarets becoming visible betokened proximity to the great city of the East. A detour was then made from the main road, the column filing off in open order across the plain, and by judicious disposition presenting a formidable appearance, though nominally less than a thousand men. The general was naturally perplexed at this juncture by not knowing whether the large garrison of Cairo had been correctly informed of Arabi's crushing defeat, and if so how they had taken it. With great confidence however, and as much show as he could make, he advanced slowly, sending on Colonel Stewart and a mixed escort of thirty men to summon the town to surrender. When close to the Abassiyeh barracks, Colonel Stewart found 6,000 infantry deployed along the barrack front, cavalry drawn up in advance with vedettes extending across Colonel Stewart however, with admirable coolness and judgment, hailed the nearest officer and desired him to acquaint the general in command that he was an envoy from the British general and sought an audience.

Shortly afterwards the Egyptian general arrived and was handed a letter from Sir Garnet Wolseley franked by the Khedive, calling on officers civil and military to render allegiance and ready obedience to all orders. The general read the letter, signified acquiescence and forwarded copies of the same tenor to the governor of the citadel and prefect of the police. Further negotiations culminated in the unconditional surrender of Cairo to a mere handful of British cavalry, who, tired and worn out, were incapable of the slightest resistance to the opposing army of 20,000.

Colonel Stewart was mainly instrumental in effecting the surrender of Arabi. Through the judicious espionage exercised by him, Arabi was brought to bay at nine in the evening, September 14th, in his own house, whence without violence he proceeded to Abassiyeh and tendered his submission, giving up his sword with a haughty yet polite bearing. For this consummate act of generalship and diplomacy combined, Sir Garnet Wolseley specially mentioned Sir Herbert in despatches.

This record of Sir Herbert's services does not exhaust them. In the Soudan expedition, 1884, under Sir Gerald Graham, V.C., he commanded the cavalry brigade, was present at El-Teb and Tamai, and was made K.C.B., receiving two clasps. In the last number of this Journal, "Our Frontispiece" represents the 10th Hussars at El-Teb—a charge which Sir Herbert Stewart led in person. It is thus described by an eye-witness:—

"During a halt the cavalry moved round, and we can now see them advancing. They are manifestly quickening their pace. Faster and faster they go. Their sabres are flashing in the sunlight and they dash into the mass of the enemy. Right through them they cut their way and then turn sharp back again. The Arabs do not fly but stand and fight stubbornly and gallantly. Again and again they are dispersed, but each time they gather together as the horsemen come on, and the cavalry, although cutting down many, go by no means scatheless through them."

The brilliant deeds of Sir Herbert Stewart and his little band in the advance to Metemmeh, are too fresh in the memory to need recapitulation. In a military sense, the nation must be proud to see that the ancient valour of her troops has been inherited by those of the present day, but politically speaking, however, the glory attaching to our recent victories is considerably discounted by the sad reflection that we have been fighting in Egypt for the past four years vaguely, purposelessly, and without any definite object. The Ancients say, "Wars avail little abroad, unless there be counsel at home," and the future historian of the Egyptian and Soudan campaigns will be sorely puzzled to account for the cause which, from Alexandria to Dulka led to such wanton effusion of human blood.

Statecraft has died out amongst our rulers, whilst heroism, military genius, pluck, endurance and discipline still flourish conspicuously in British troops, and, perchance, the shame with which England speaks of the incompetence of Her Majesty's advisers may pass away, obscured by the halo spread around her by the splendid achievements of her army.

# A. L'ESTRANGE.

Note.—Soon after this biography was printed and revised, I was truly grieved to hear through the public press, of the untimely death of the gallant General Stewart, from the effects of the dangerous wound he received near Metemmeh. It has been with feelings of great sadness, that I have re-revised his biography and altered the wording where necessary, from the present to the past sense.

Editor.

## SHOT AND SHELL.

#### BY MRS. POWER O'DONOGHUE.

Authoress of "Ladies on Horseback," "Unfairly Won," "A Beggar on Horseback," etc. etc.

#### CHAPTER III.

THE wind had risen considerably within an hour. Dense masses of cloud hung loweringly above the cottage roof; the sky was like a muffled pall.

Sullen and dark the evening had come on; a heavy apprehension seemed gathered in the air, a threatening of some atmospheric trouble, ere long to burst upon the vast and unsheltered plain.

Shell was not afraid. To her, nature, heaven, earth, held nothing to fear, and everything for reflection. She was young, and could lose the sense of what was, by thinking of what was to be—unlike the old, who, having no earthly future to look forward to, are ever vividly alive to the present, and fearful of the perils that surround it.

Striking rapidly out in the direction she had been told to take, the girl made way with difficulty against the wind, which, ere long, accompanied by a driving sleet, made travelling exceedingly unpleasant.

"I wonder is it as late as it looks," thought Shell; "I have not got my watch, and gran's clock may not be one to be depended on. How I wish now that I had told Shot to meet me at the cottage and not at the Hollow, only that he knew where to find one, and had not any idea of the other. What if I should miss him after all!" and she quickened her pace almost to a run.

The road which she and her little pilot had travelled so gaily only two short hours before, now seemed terribly long and wearisome, and despite her courage, all the stories that she had ever listened to of modern Claude Duvals, bandits, and heartless molesters of beauty, flashed through her mind, as she beheld through the gloom two stalwart figures advancing towards her,—and creeping into the hedge that skirted the roadway she waited to see them go by.

They were nothing so dreadful-looking, after all: only a soldier, and a man who carried an umbrella and wore a long coat. They passed on, and the girl emerged, almost laughing, from her hiding-place and hastened forward as before.

A few minutes' brisk walking brought her to a row of small irregularly-built cottages, and passing them, the lights from the hotel at the cross-roads became visible. All was so far well, she had reached Field's. Athgarvan lay on her left, the low-roofed lodge almost in front of her—the stagnant pool, where the cattle pastured on the plain were compelled to drink for want of a better watering-place, shining weirdly in the uncertain light.



"I Guess it's Sweetheartin you'd be, you're on the Right Road Miss."

To go to the right at this point had been her instructions, and obeying the direction given her, she fought her way onward through the storm for what seemed a very long while indeed, without noting a hollow of any kind, or meeting with anybody of whom she could request information. "I must have passed it, or gone wrong," was her reflection; "but here comes a carter, he will be sure to know," and drawing close to one side of the narrow roadway, bounded as it was on each side by the trackless plain, she called to the driver of the vehicle to pull up, and questioned him as to her whereabouts.

"Donnelly's Hollow?" repeated the carter, a loutish, clumsy fellow, with a voice like a foghorn; "sure it's your back you're turnin' to it; you must ha' passed it as you came along this road. It's straight for the camp you're makin' now—them's the lights beyant. There's no one in the Hollow at this time o' the evenin', that's up to any good."

"I promised to meet my brother there," said Miss Netherby, feeling fear for the first time stealing over her in the presence of this uncouth man; "won't you please direct me?"

"Oh larks, your brother!" exclaimed the carter, bursting into a coarse laugh. "I guess it's sweetheartin' you be.

You're on the right road, miss!" and with another loud guffaw, and a sing-song accompaniment of "Your brother!

—I guess it's your brother you're waitin' for!" he whipped his worn-out horse into a trot, and went noisily forward.

Confused and bewildered, the girl stood and looked about her like a startled fawn. The thousand lights from the wide-spreading camp danced merrily out upon the gathering darkness. The clouds, driven by the force of a great wind, swept on in massy columns, dark and aspiringveiling, while they rolled up to, the great heavens, like the shadows of human doubt; and across the broad expanse of the mighty unprotected plain, seemingly a very desert of desolation, the strong wind swept and raved. Uncertain what to do, whether to go forward, backward, or to remain still until some guide or assistance might chance to arrive, the puzzled wanderer stood for an instant irresolute, pondering what course to take. "He said at first that I had passed it," she reflected; "that must be right," and she turned to retrace her steps. As she did so a terrific squall, accompanied by blinding sleet, drove her ruthlessly before it, pushing her on, lifting her almost from the ground, driving her whither she knew not, until somebody stopped her pathway—somebody whose form, well knit and strongly proportioned, was capable of defying the fury of the sweeping wind, while a bright and cheery, though slightly tremulous voice, said, "Miss Netherby, it is you! Thank God I have found you at last!"

"Where am I?" said Shell, laughing and crying together. "I can't find Donnelly's Hollow—I can't find Shot. Has he looked for me, the bad boy? And how is it that you have come to discover me, Mr. Eyre?"

"Looked for you? I should think he has! We were both at the appointed spot at the right time, he and I together, but you were not to be seen. We waited half an hour; then, as you had not come, and it was growing dusk and coming on to rain, Shot chartered a soldier, and by dint of the most wonderful hints and explanations, managed to make him understand something of where he wanted to go, and by another sort of hint induced him to act as pilot to the cottage, while I agreed to wander about here and keep watch for you, in case you should have left before his arrival. A very rough specimen of a charioteer managed to let me know in which direction you had come."

"Then I actually passed Shot on the road," groaned poor Shell, "and mistook him for a footpad. Fancy being afraid of one's own brother!" and she laughed in spite of her distress.

"You will not I hope be afraid to trust yourself to my guidance now," said Eyre, "or rather to my protection, for you must in great measure be the guide. I know the way as far as the cross-roads, and we are much closer to them than you think."

"Then it is all quite right," cried Shell joyfully, "for I know every step of the road from Athgarvan corner; so

come along, we shall find Shot and old Nancy—gran, as I call her—telling yarns to one another, if not fighting, as they used to do, and the old lady shall entertain us all at tea. This is quite a delightful adventure, though it promised so badly a while ago." And accepting the strong arm offered her, Shell nestled close to her protector, and they walked, or rather ran, before the wind until the cross-roads were reached.

"You will have to sleep at the hotel to-night," Reginald said, as they hurried along. "There won't be a chance of catching the last train from Newbridge."

"I sha'n't mind a bit," said the cheerful Shell; "now that my escapade has ended so satisfactorily, a barn would do me quite well, for I am dead tired; but I rather think I shall stop the night with my old nurse, and you and Shot can find comfortable lodging at Field's. I shall not care to venture out again in this storm, once I get some dry clothing on, and have taken my seat in the cosy chimney-corner."

Despite the rain, the cold, and the driving storm, that walk, taken under such peculiar circumstances, was the happiest by far that either had ever enjoyed. Clinging closely to the protecting arm, with a satisfying sense of most complete security, the girl walked beside her supporter in the fulness of loving trust, while he, almost too happy for words, sheltered her as best he could from the force of the angry wind, and spoke only in murmurs until they arrived at the cottage, where they discovered the imperturbable Shot lounging in the dame's best chair, and puffing a meerschaum with extreme tranquillity.

"Well, you might at least have come out to look for me when you found I was not here!" cried Shell, pretending to pout, and throwing aside her dripping outer garments; "I might have been lost. It was awfully shabby of you! Was it not, gran?"

"Very shabby, tremendously so," Shot said mockingly. "It so happens, young lady, that I did go out, but before I had gone very far I beheld two figures that I thought I knew coming quietly up the road, so I turned tail at once; for I would not for worlds spoil a nice, pleasant, snug, agreeable, seldom-indulged-in tête-à-tête between two highly interesting young persons with both of whom I am acquainted—most certainly and decidedly not."

And waving his well-shaped hands with a courteous gesture, Shot spread them over the blaze, and fairly turning his back, winked at the dame, and pretended to be occupied in staring at a picture of Daniel in a green coat in the midst of a den of red lions, which hung over the mantel-piece above the wide grate.

But that night, when he and his quondam brother officer were sitting together before a cosy fire in the snug coffeeroom at Field's, they held conversation of a nature somewhat more serious, and Shot, laying his hand upon Reginald's shoulder, said, without badinage:

"Look here, dear old boy; you're a good sportsman, and

will know what I mean. I have measured the course with an accurate eye, and have seen all the starters since the governor died—at all events, I have known how they fared. There is one hard fence to be got over, and many a good man and true has come to grief at it—been prostrated in fact, for it's a rum difficult one to take, deuced



SHELL AND HER ESCORT.

rum, and no mistake; but you have been first of the lot from the very start, went to the post a hot favourite, and have made all the running. You have, in fact, scattered your field and left the others nowhere, so now take up your whalebone and make your rush. A win is certain, or I haven't studied the stakes; and you have my consent with all my heart, and a most glad one too, I can assure you."

#### CHAPTER IV.

PRETTY Shell Netherby was dining, in company with her brother, at one of those overgrown London restaurants where "Dinner 3s. 6d.; table and attendance 6d. each person," is announced fairly and openly, to all appearance, upon the cards, the compilers of which, however, entirely forgot to mention that although attendance is thus charged, the attendant will nevertheless expect a share of the spoils to be derived from the unwary, as will likewise the agile youth who skips obsequiously forward to take charge of the unwary's hat and stick.

Shell believed that they were economising most praiseworthily. She had given Shot his way for the first few days of their sojourn in town, and had dined like a princess every evening on the costliest fare in the very costliest houses—half-startled, however, to perceive that her brother invariably laid two sovereigns upon the plate on which the bill made its appearance at his elbow, and got back marvellously little change. Now there had come a turn in the tide. Shot had confessed to a compulsory parting (of a temporary nature, he declared) with a family heirloom of considerable intrinsic value, and with sudden alarm and apprehension, the girl had declared now against all unnecessary expenditure, and as a commencement of economies had stipulated for a three-and-sixpenny dinner, with light claret added in place of extra superior champagne.

"It's not an especially aristocratic place, I think you'll acknowledge," Shot said, half pettishly, as he glanced in a covert sort of way over the top of the *menu* card, which he held close up to his face. "By Jove! I hope none of our fellows will chance to come in and find me here with you."

He spoke as though the days of his soldiering were not in anywise ended, and as though he had entirely forgotten his lament to Reginald Eyre about the grey worsteds and shorts, and the probability of his greeting company within the shelter of the porch at Zale with a sprig of shillelagh in the grip of his toil-hardened hand, and a pipe adorning the band of his cauteen.

"I don't mind a bit whether they do or not," Shell answered, humouring his forgetfulness and affecting not to notice it. "I'm sure there are plenty of ladies here this evening, and if people aren't rich they need not think it any shame to be careful about their money." And with very pink cheeks and a slightly-heaving bosom, the young economist sat back in her chair and surveyed the company with a prettily defiant air, while Shot studied the wine-list and the manager strolled back and forth in front of them, seemingly unnoticing, but at the same time taking occasional glances at the handsome young couple, who somehow looked different from everybody else in the room.

Young Netherby was a long while making up his mind over an apparently easy matter and his sister had therefore ample time to look about her. There were noisy parties of four, and noisier of six at some of the tables—a good deal of laughter going forward, accompanied by popping of corks. Quiet parties there were at others: elderly ladies, stout and matronly, with bonnet-strings laid demurely over their shoulders, and homely representatives of country homesteads grouped like olive plants round about the board. Here sat a flashy couple, the lady diamond-decked and opera-cloaked, the gentleman displaying highly-varnished boots and a blazing sun upon his bosom; and there was a pair of a different sort—an elderly gentleman who gorged and drank, and snarled at the attendant, while the faded and depressed-looking

woman by his side scarce dared to open her mouth, even to put food into it, and sighed heavily from time to time as her unsocial lord grumbled over the viands, and sent dishes away untasted, with the audible observation that "the look of them was quite enough."

Shell was lost in observation of persons and things, and was smiling to herself at seeing the manner in which the flashy young lady, and others of her type, contrived to find out some distant object at which to gaze while the settlement of the bill was going forward, or managed to discover that a glove-button required a good deal of manipulation, or that a cough had to be treated with lozenges behind a daintily embroidered pockethandkerchief. She was thinking what pleasant pastime it was to her to watch them, and how little it seemed to matter whether or not any of Shot's soldier friends should chance to discover him and her dining off un-ambrosial fare, when a man—a noticeable one—sauntered in alone, and after a long stare about him, took his eye-glass out of his eye, and sat down with a careless devil-may care air at a table close to the one at which she and her brother were prepared to dine. A party of men had just vacated it and the new-comer looked sullenly at the debris and called up the nearest waiter, a freshly imported Swiss who spoke ambiguous English, and wore an unlimited crop of unkempt hair.

"Look sharp here," said the stranger, as the foreigner bowed at his elbow. "Clear up them things and be quick about it. I don't want to sleep here, d'ye see."

"Yes sare; certainly, sare; you vould like your meal zerved vidout delay. I understhand."

"No you don't, I'll be hanged if you do!" said the man, angrily; "I want no meal; I ain't a hoss! What have you got for dinner?"

"Sare, we hev vot is on de bill-fare. We hev purée à la celestine, and rouget butterfly, and fricassée à la Dauphine, and dindon, and jambon, and—"

"Hold that lingo!" cried the stranger, impatiently—
"divil a word of it can I make out! Bring me a cut o'
mutton, or a piece o' good Limerick bacon, and don't go to
sleep over it either. D'you hear me?"

"Sare," responded the waiter, with a shrug, "I hear, but I not untherstan'. I bring you fare-bill, and you say vot you vill hev."

"Bacon! I'll have bacon! Do you hear that?" cried the guest, roaring the words, as though he believed that by so doing he could make himself understood; "do you know what bacon is, that you mayn't go bringing me a wasp's nest, or a peacock's tail instead of it?"

Another helpless shrug on the part of the attendant, and the irate questioner stood up.

"Will anyone," he said looking from right to left, and round about in every direction—"anyone at all, be good enough to oblige me with the French for ass, donkey, fool, or idiot, for this fellow?"—and then as sundry bursts of suppressed laughter greeted his inquiry, he sat down

again, very red and annoyed, and asked loudly for the proprietor.

"As for you," he said, turning disgustedly to the oblivious waiter—"you may cut your stick and leave me here, for I don't know one word o' your confounded jargon."

"Yes, sare;" replied the Swiss, looking dreadfully puzzled; and disappearing like a flash of lightning he returned in a moment with the temporarily absent manager, who stood politely awaiting the commands of the complainant, who, unconscious of his vicinity, sat picking his teeth, and cocking his eyeglass, and staring very hard at Shell.

"I fear, sir," he said, "that bacon is not on the menu for this evening, nor indeed is mutton, but if you will trust me to cater for you, I think I shall be able to give you satisfaction."

"Well, all right; there, I'm satisfied," was the half sulky, half laughing, rejoinder. "Only tell that queer chap to get his hair cut, and to call things by their names in sound English, and to bring me good roast and boiled, with good sound liquor to wash it down with, and no kickshaws, for I hate 'em!"

The listener smiled and bowed, and having asked young Netherby, who was known to him, whether he could do anything to oblige him, he spoke for an instant or two at his elbow, and then walked away, still smiling, to another part of the room.

"Them forrin waiters is monstrous hard to understand," observed the stranger, addressing Netherby, and hitching his table as close as he possibly could, while he gazed covertly at Shell; "and what a sight o' them there is in London, to be sure! Every blessed tavern, or this kind o' thing, that you chance to go into, you're lingoed by them, and can't get a decent word of English spoke to you for love or money! What does it all mean, I want to know, that honest boys won't be given a chance in their own country, but must get shouldered out by them snobs o' mop-heads with their long names and long backs, and long hair getting into all the soups and gravies. Bad luck to them!"

Netherby looked up from his wine list and smiled. He had undoubtedly chanced upon one of his own countrymen though one of a somewhat different type from himself. He glanced down again in a moment, however, lest his amusement should be regarded as encouragement, while Shell, who possessed an overwhelmingly keen sense of the ridiculous, concealed her face behind her handkerchief and indulged in a hearty laugh.

The speaker was certainly worth looking at, and worth laughing at also. He was a young man, rather short in stature, and decidedly inclined to stoutness; not particularly plain-looking—rather pleasant and comely than otherwise—but without much of the appearance of a gentleman about him. His face was clean shaven, and had a good deal of colour about it, and his moustaches

were heavily waxed, and well turned up at the points. His costume was unique: a very short coat of brown and white check, showy-patterned trowsers, varnished boots, a lavender tie, and a quantity of watch-chain and rings.

More than once during the progress of dinner he addressed himself to Netherby, but finding that his efforts at making acquaintance were somewhat coldly received, he gave up the pursuit, and turned his undivided attention to the good things provided for him. He ate voraciously, and totally ignoring all table etiquette, performed feats of legerdemain and gastronomy that kept Shell half choked with smothered laughter.

He had finished his repast, and had got through a goodly quantity of gin punch, ere the brother and sister had commenced their dessert, and when he came to a conclusion he stood up, adjusted his waistcoat, slapped his pockets, sounded his chest, refused to pay his bill to any save the manager, and, having arranged everything to his own satisfaction, strolled out in company with that gentleman.

"Who's the young prig that sat near me at dinner?" Shell heard him query as they passed by her end of the table on their way to the door; and although the reply was inaudible, spoken as it was with bent head, the tones of the questioner were far from being so as he said, "Netherby! A Galway man! Gad! I know—Gad!—on my honor—I say—just think of it!—Netherby of Zale. By Jove!"

And when, a quarter of an hour later, Shot and his sister quitted the dining-room, the latter, at all events, was embarrassed to perceive that the man in the check coat was standing quietly on the first landing, seemingly occupied in admiring his own figure in the long glass; and still more embarrassed and annoyed was she to find that they were followed to their lodgings in Jermyn Street, and that the check coat was conspicuous on the opposite side of the flagway when Shot was closing the door.

. (To be continued.)



# ANNIVERSARIES OF BRITISH VICTORIES.

#### THE NAVAL ACTION AT HERQUI IN 1796.

Few men were endowed to a greater extent with that force of character which apparently changes the nature of others and imbues them with its own qualities than the famous Sir Sidney Smith. The men who served under him were inspired by his audacity and resolution. The following is one of a series of his exploits, many of which seem to pass the bounds of sober history.

In March, 1796, Sir Sidney Smith, in the Diamond of thirty-eight guns, with a gun-brig, and a hired lugger which had volunteered to join him, sailed for the small port of Herqui on the north coast of France. He knew that the harbour was commanded by two batteries of heavy guns on a rocky promontory; and he heard that an eighteen-gun corvette and eight smaller vessels had taken shelter there from the British cruisers. On the 17th he sent a party of sailors and marines in boats to land behind the batteries and take them in reverse. A body of French troops offered such opposition to the landing that the direction of the attack was changed to the front of the batteries. While the Diamond drew the attention of

the French soldiers by her fire, the party from the boats scaled the heights, stormed the batteries, and spiked the guns. Then the frigate sailed farther into the harbour, and took and then burned the corvette and a brig. As the tide ebbed our ships drew off for a few hours; but, returning with the next tide, they completed the destruction of all the French vessels except one, which escaped. At 10 P.M., the wind and tide suiting, they sailed out, being fired at in passing by one gun which must have been unspiked. We lost only two sailors killed, and two officers and five sailors wounded. One of the officers, a lieutenant of marines, died of his wound.

In an attempt to cut out a vessel a month later Sir Sidney was unfortunately taken prisoner. After two years' captivity, during which he was shamefully treated, he escaped in time to foil the utmost efforts of Napoleon's veterans in the breach at Acre, which was defended by British sailors and marines.

E. O'CALLAGHAN.

# NEW GERMAN COMMISSARIAT WAGON.

(Translation from the Militär-Wochenblatt.)

AVAILING themselves of a regulation of the War Office which permits a regiment in the case of mobilisation to use their own instead of the usual commissariat wagon, the 1st Baden Life Grenadier Regiment have caused a vehicle to be constructed which is said to satisfy in every particular the needs and convenience of the troops during manœuvres whose conditions are so like those of real warfare as to afford a fair test of its practical value. Starting with the conditions that in general appearance and construction the new commissariat wagon should resemble as much as possible the one in general use, the following clauses were laid down as absolutely indispensable:—

- 1. Sufficient room for the transport of extra provisions.
- 2. Durability to be combined with consistent lightness.
- 3. The weight of the wagon when full not to exceed a moderate load for two horses over any ground.
  - 4. Convenience of interior construction.
- 5. It should be possible to use the wagon for other than commissariat purposes.

According to these directions a vehicle has been constructed by U. Kautt and Sons of Karlsruhe which is said to satisfy them in the fullest particular. Externally, its appearance is much the same as that of the regulation pack-wagon. A covered driver's and an open conductor's seat, the latter accompanied by a movable footrest, provide for the transport of the personnel of the wagon. A gallery carried round the roof may be used for such heavy packages as are too bulky to be inserted into the interior. Parcels of this kind are preserved from damp by a watertight linen covering. Immovable wooden louvres provide the ventilation necessary to the good preservation of perishable provisions. Every compartment is accessible from the outside, and the panels may be let down in the usual manner. The end ones, especially, are designed, when supported on iron rests, to serve as a shelf or counter for the sale of the provisions, and when so let down bring the articles designed for this portion of the vehicle within easy reach of the salesmen. By this arrangement, furthermore, purchasers can approach from both sides, and much unnecessary crowning and inconvenience is thereby obviated. The prices of the different provisions should be clearly and legibly written on a wooden tablet affixed to the side of the wagon.

In the interior the wagon is divided into four compartments (Fig. 3), of which the first (A) is designed principally for the transport of smoked meat, in its under part for the cash boxes, for tobacco, cheese, and such commodities. The next divison (B) contains four casks each holding fifty litres of wine, brandy, and water, while the third and largest (C) is destined to carry a large supply of bread. The last of the large compartments (D) is

designed for the transport of sausages and other forms of smoked meat, coffee, sugar, and a weighing machine. It should also contain a supply of bread, cigars, tobacco, cheese, etc., intended for immediate consumption. Underneath the latter three compartments runs another (E), approachable from the front and back, for the carriage of tobacco and cigars. Between this and B there is another small division for drinking utensils of varying size. The driving seat forms a stationery compartment for writing materials of all kinds.

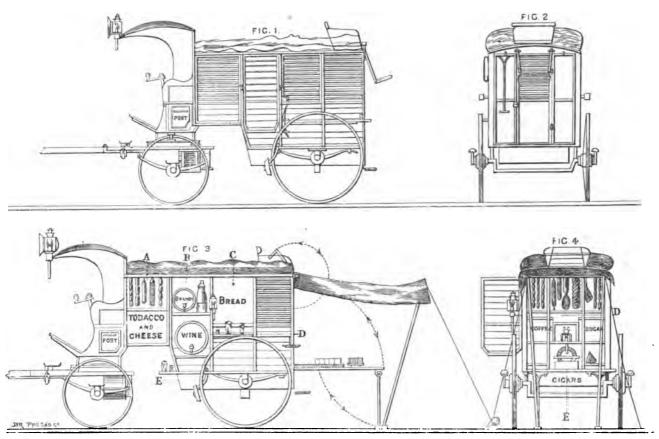
The proportions of the different commodities with which the wagon is loaded are as follow: twelve to fifteen kilos of chocolate; ten kilos of roasted coffee; twenty-five kilos of sugar; 200 kilos of bread; 200 kilos of smoked meat, sausages and bacon; fifty kilos of coffee; 9,000 cigars; 200 packets of tobacco; fifty litres each of red and white wine, brandy, and water; about twenty bottles of cognac, arac, rum and kirschwasser; 1,000 sheets of note-paper and field postcards; three gross of steel pens; three dozen penholders; five dozen pencils. Besides these it contains implements intended for the convenient distribution of the goods; tools, such as saws and axes; four camp stools; six picket pegs with rope; three wagon lanterns; a few enamelled plates; fifty drinking vessels from  $\frac{1}{32}$  to  $\frac{1}{2}$  litre measure, and numerous other small articles, including materials for cleansing the wagon. The weight of the wagon alone, complete in all its parts, is sixteen cwt.; that of its load eighteen cwt.

The sale of the different commodities is regulated to proceed on a fixed plan. At the counter before alluded to, formed by letting down the rear panels of the wagon, only food and tobaccos are to be sold. The drinks are to be distributed from the side from which the casks are most easily accessible. The drinking utensils can be placed near at hand on boards designed for the purpose; while the casks are so placed that they can be moved forward as far as the convenience of broaching may require. Wooden gauges made to fit the bung remove all doubt as to the amount of liquor sold; and thus render peculation on the part of the drawers impossible. Over the rear counter a covering may be spread, as depicted in the illustration, affording protection to the personnel of the wagon both against sun and rain. Lanterns are provided for trading during darkness.

During the manœuvres of last year, in which the regiment were allowed to use this wagon, it received the roughest and severest test. It more than realised throughout the many advantages claimed by its designers and constructors. Although the country in which it was employed was hilly in the extreme, and the wagon fully loaded, it was drawn without apparent effort by two horses over good and bad roads alike. The lightness and handiness of its construction enabled it to keep up with

every movement of the troops whose wants it was intended to supply; while during the whole of the operations it did not require the least repair, nor any attention beyond the lubrication necessary for all rolling stock. Detailed instructions were drawn up by the staff officers of the regiment for the management and control of this novel commissariat wagon; and the most various contingencies provided for. With due regard to detail, the prices of all articles sold were fixed on a fair and equitable base. The quickness with which the different articles were disposed of was the object of special remark and general approval. The casks, as was expected, were easy of access; and the interior space was utilised to the greatest advantage. The constant ventilation afforded by

stores, it can nevertheless by a few alterations be made available for the carriage of munitions of war. For this end the interior construction of the wagon is such that on the slightest notice the different compartments can be enlarged without any damage to the vehicle itself; while the wooden divisions can be placed in the under compartment (E), otherwise designed for the carriage of cigars. An open space of 2.26 metres long, 1.24 metres high, and 1.16 metres broad is thereby formed. If the foremost compartment (A) be not disturbed, the length would be 1.60 metres. These open spaces would be not only extremely useful for foraging purposes, but on emergency for the carriage of wounded men. In this case the importance of the ventilation secured by the louvre blinds,



GERMAN COMMISSARIAT SUPPLY WAGON.

the louvres preserved the meat in excellent condition, untainted by the warm weather which prevailed throughout the manœuvres. The necessity of packing was reduced to a minimum—a consideration of vast importance in itself; while the fact that the panels had only to be securely refastened to make everything ready for the march, permitted frequent stoppages for the purposes of trade, without materially affecting the forward movement of the wagon. Although the commissariat wagon now under description was at first intended to serve the requirements of only one battalion, its capabilities were found to be equal to cope with the provisioning of two.

Primarily designed for the transport of commissariat

and the presence of the four camp stools, can scarcely be over-estimated. Although the wagon is ample enough for the carriage of a daily ration, the bread occupies so much room that it would perhaps be preferable to devote a separate vehicle to its transport, and apply the newly designed one to a battalion, instead of two companies, as was originally intended. In this event, the contents of the wagon would require to be replenished every three days. The general impression among officers in the whole German service is that Herr Kautt has complied with the conditions laid down in the most satisfactory manner. In conclusion, it may be remarked that the price of the wagon is only 850 M., or £42 10s.

# ANNIVERSARIES OF BRITISH VICTORIES.

#### THE CAPTURE OF BANGALORE.

THE storming of the town and fort of Bangalore were the most important successes in the campaign of 1791 against Tippoo Sultan. Lord Cornwallis appeared before the place with his army on the 5th of March, and occupied his intended position almost unopposed. An unfortunate cavalry action took place in the vicinity on the 6th, when Colonel Floyd's brigade suffered so severely as to be unable to render much service in covering the siege.

The "pettah" or town was of large extent, and from its close proximity to the fort, would afford excellent cover for the approaches against the latter. No scaling ladders were available, but, as time was of the utmost consequence, it was determined to force an entrance by one of the gateways. Accordingly, very early on the morning of the 7th, a storming party consisting of the 36th Regiment, and the 26th Bengal Native Infantry, marched to the north, or Delhi, gate of the town. They were accompanied by



GENERAL MEDOWS.

From a portrait engraved by H. R. Cook, after W. Haines.

some artillery, under Lieut.-Colonel Moorhouse, with two 12-pounders and four 18-pounders. An outer barricade was easily carried by the 36th, but the gate, having been strengthened by masonry, offered such resistance that the 12-pounders failed to breach it. The 18-pounders were then brought up, and soon made a small opening, through which Lieut. Eyre of the 36th, an officer of uncommonly small stature, fearlessly entered. Major-General Medows, who was with the stormers, and whose sense of humour no amount of personal danger could dull, called out to the grenadiers "Now, then whiskers, aren't you going to follow the little gentleman?" The soldiers at once responded to this odd appeal, and forced their way through the opening, which was soon The town was cleared after a succession of street fights in which about 2000 of the Mysoreans were killed or wounded. Our casualties were only 131. Among the wounded was Lieut. Eyre of the 36th; and among the

killed was Lieut.-Colonel Moorhouse of the Madras Artillery, who, after receiving two wounds, continued to animate his men, and to direct their exertions, till he fell near the gate, pierced by two bullets through the chest. The merits and career of this remarkable officer are thus happily epitomised by Wilks: "He had risen from the ranks, but nature herself had made him a gentleman. Uneducated, he had made himself a man of science. A career of uninterrupted distinction had commanded general respect, and his amiable character universal attachment. The regret of his general, and the respect of his Government, were testified by a monument erected at the public expense in the church at Madras."

Tippoo attempted to recover the town on the day following that of its capture, but was repulsed without much difficulty. The siege of the fort then began. Some batteries were completed and opened fire on the 15th against the north side of the fort, that nearest to the town The camp was so much troubled by a cannonade from Tippoo's army on the 17th, and again on the 21st, that Lord Cornwallis made arrangements to storm on the night of the 21st, as the breach was reported practicable. The forlorn hope consisted of thirty "chosen men"-from a larger number of volunteers, doubtless-led by Lieutenant James Duncan of the 71st and Lieutenant John Evans of the 52nd. Next came the grenadiers of the 36th, 52nd, 71st, 72nd, 74th, and 76th, followed by the light companies of the same regiments. The battalion companies, of the 36th, 72nd, and 76th, formed the support, with some battalions of Bengal sepoys. The assault was completely successful, though the resistance was very deter-We lost 103 killed and wounded, and about 1000 of the enemy were killed, mostly with the bayonet. Our total loss during the siege was 430.

When the difficulty of obtaining provisions, the absence of ordinary siege appliances, the strength of the place attacked, the formidable character of Tippoo and the numerical superiority of his troops, and the momentous issues at stake are fairly considered, the capture of Bangalore seems eminently worthy of commemoration on the colours of the regiments engaged. The 76th have a fair list of unrecorded victories, and the 52nd have a long roll of American and Indian names that may yet be added to its Peninsular honours. The other regiments, too, would gladly receive the addition of "Bangalore 1791."

Note.—The lamented General Neill, in his history of his old regiment, the Madras Fusileers, says that the 4th battalion of the regiment took part in the siege of Bangalore and the storming of the fort. I have not found any confirmation of this in any of the other accounts (more than a score, which I have consulted. The battalion he names formed part of the force under Major-General Medows, but their share in the operations near Bangalore seems uncertain.

#### EDITORIAL.

#### OUR GUN ARMAMENT.

BEFORE resuming the connected relation of facts concerning the gun armament of this country, I am compelled perforce of circumstances, to make a few remarks about what is now going on with reference to this armament. That which is at present in progress, is of so dangerous a character, that I cannot possibly let it pass without the strongest animadversions.

In the first place, let me remark that, notwithstanding all the evils that have gone before, and through which the nation has been shamefully hoodwinked, plundered, and landed in disaster in relation to its gun armament, there is now being worked a scheme, partly political, partly commercial, so specious, so scandalously wrong, that scarcely any one outside the charmed circle of officialism will venture to believe it to be in course of operation. This scheme is to hand over to the Admiralty the supply of the whole of its ordnance, gun-carriages, and ammunition.

I observed soon after the appointment to the Admiralty of a member of the Elswick Ordnance Company three or four years ago, that an enormous sum was inserted in the estimates for the purchase of naval gun-carriages. Now, I looked upon this circumstance with the gravest uneasiness, and I therefore watched carefully for that which I felt sure would follow sooner or later. I felt, indeed, that this arrangement was but the prelude to others of a more gigantic nature. I formed the opinion that the stages by which this preliminary arrangement was effected, would ultimately culminate in one grand scheme by which the Admiralty would be handed over the entire supply of the country's naval armament, and with one result.

I do not for one moment care what others may say, personally I have always regarded the appointment I have named as being, on public grounds, of a most injudicious character. I am writing on a great public question—one indeed of the highest importance to my country. I have nothing whatever to say against the personal character of the gentleman who received the appointment. I state that it ought never to have been made, and I say that, in my opinion, it was highly dangerous, and leading to a very unfortunate condition of affairs in connection with our gun armament. It is a patent fact that the sums in the estimates for naval ordnance, gun-carriages, &c., to be procured by contract, have been for some years past growing to enormous proportions.

Whether any particular firm or firms imagine they possess influence in high quarters or not, and that public opinion must be forced by the aid of the *Press*, I am not in an absolute position to prove; but what is now in progress? What do I now perceive? I observe, in the first place, that the *Times* is again acting as it did in the preliminary stages of the Armstrong gun era. During that period, these stages were systematically worked through by every aid which could be brought to bear The *Times*, particularly, again and again wrote up the Armstrong system of artillery, both by special and by leading articles. Public opinion, unfortunately too often guided

by what the Times has to say on armament questions, was led in a wrong direction. To make a long story short, the Times was greatly responsible for leading public opinion in a direction by which the nation was ultimately landed in failure, and in disaster with reference to its gun armament, and to a public loss of nearly £4,000,000 of hard cash. I have perceived that the Times has been drawing attention to the unfitness of artillery officers for the post of Government manufacturers of ordnance. At least, that is the conclusion I have come to on reading one or more of its leading articles on the subject of our gun armament. Is the Times aware that the Armstrong and Mitchell Shipbuilding and Ordnance Company have now in its employ as its chief advisers, constructors, and travellers, &c., artillery and other officers whom this company has obtained from positions of experience under the War Office manufacturing and other establishments, and at much higher salaries than they were receiving under Government?—officers who have resigned their official and military posts to take positions in this private firm at these greater salaries. The Times is probably not aware that some of these former artillery officers are now partners in this private ordnance factory. Is the Times aware that the manufacturing and other education of these officers was paid for by the State, and that all the experience they gained in order to go to this private ordnance factory, and all the plans and other information they were in a position to obtain while in the Government employ, were also paid for by the State? I do not for one moment assert that British officers who work hard to gain experience to fit themselves for responsible positions, are properly encouraged: it unfortunately happens that the contrary is the fact—I shall presently relate a case under this latter head. But what I do say is that, in furtherance of a gigantic scheme which will sooner or later involve the nation in failure and enormous cost, the public mind is being prepared, through the agency of the Times particularly, for a change in the method of producing our naval ordnance—a change that will hand it over entirely to contract, both in design and manufacture. I have, unfortunately, witnessed the disastrous effects of handing over to contract the entire manufacture and designing of the naval ordnance of this country, and I cannot refrain from warning the Times, and the whole of the Press, that it will be responsible for a great national disaster, if it perseveres in that which appears to be sought through its advocacy, namely, the foisting upon the nation of a preference for the interests of commercial firms, in a matter involving the safety of those ships, those officers, and those gallant seamen whom Great Britain places upon the sea to defend the interests of her Empire.

The Times in its presumed advocacy of the gigantic commercial scheme sought to be obtained through its agency, has, in its arguments, drawn attention to the number of failures in naval and other ordnance made by the artillerist manufacturers of the Government; but it made no allusion whatever to the accident to the 100-ton guns on board the Italian ironclad Duilio, to other failures in contract-made ordnance, and to the

accidents to one or more of the four 100-ton guns wrongly purchased of the Elswick Ordnance Company by the British Government for £64,000, added to which was the cost of mounting them, another £20,000. These enormous guns are a dead loss to Great Britain. I have been informed on good authority, that the Italian Government, in consequence of non-reliability of the 100-ton guns, repudiated the completion of the contract for these natures of guns by the Elswick Ordnance Company, and that their purchase by the British Government was "a big job." I have no doubt whatever that the latter is true. is something rotten in the state of Denmark," to use an old simile. Why is the Times once more guiding the public in a wrong direction, by which the country will be once more landed in failure, in disaster, and in a terrible loss of money? Are the Times and other "leading organs" aware, that in support of a gigantic scheme to get the Admiralty to take the manufacture of its ordnance into its own hands, that the Admiralty possesses no factories, in which to produce its ordnance—that the Admiralty would have to put the entire production of the naval ordnance of this country out to contract—to one firm, Messrs. Armstrong, Mitchell and Co., at a cost of 25, and, ultimately, to 40 per cent. beyond the price at which the guns can be made in the Government factory at the Royal Arsenal? The country has passed through one gigantic era of jobbery, the Armstrong-gun era, by which the country's gun armament was handed over, "bound hand and foot," so to speak, to Sir W. Armstrong and the Elswick Ordnance Company, to the national loss of nearly £4,000,000, and to the terrible failure of its ordnance at a very critical period of its history.

If the Admiralty desires to design its own armament by the aid of its gunnery and other experts, is it not absolutely clear that the guns, carriages, and ammunition can be loyally and correctly manufactured in the Royal Arsenal under naval supervision if necessary, and where the nation has spent millions of money in enormous plant and machinery for the purpose of carrying out the supply of naval armament with economy and excellence of workmanship? But no, this will not suit the objects of commercial and other schemers, by which the country may be plundered through getting the entire manufacture of naval armaments into their own hands at an enormous profit, and through which they may be able to command the whole situation to their own personal advantage. The enormous State plant and machinery must rust away in idleness, the public money must be wantonly wasted in this scandalous manner to advance the schemes of commercial plotters for their own interest to the national danger in critical times. Wheels within wheels indeed! The whole arrangement, if allowed to be established, will once more turn out a gigantic, costly and disastrous fraud upon the country. The £4,000,000 that were thrown away to carry out an almost identical scheme, will mean £8,000,000 and then ignominious failure.

I am absolutely astounded, in face of this, at the course of action the *Times* is again repeating, and, as time goes on, I will venture to let this "leading organ" know a few facts which its Editor is not aware of. I have not yet done with the *Times* and its wrong advocacy of that

which, from my personal knowledge and experience, will again place this country in a perilous position if persevered with.

I regret to find that my observations in relation to the scheme I have exposed, have prevented me from making known at present, the ungrateful manner in which the present Government is acting towards the gallant officer who is the superintendent of the Royal Gun Factory, and through which, he has, to serve political ends, been forced to surrender the results of years of laborious and scientific work in the production of steel for gun purposes into the hands of commercial men whose votes the Government feared to lose, if they did not hand over to political interests the results of this able officer's skill and energy. What does the present Government care about the ruin and idleness of the State manufactories, provided political interests are served?—Nothing. I feel sure that history will some day say that the ruin of this great and glorious country, was due to the effects of party strife for power and place, in order to gain political ends, to the sacrifice of every national interest.

I must resume my narration of connected facts concerning our gun armament in my next issue.

# THE HARDEN "STAR" HAND GRENADE.

I was present at a series of experiments made on the open space in front of the Savoy Theatre with the Harden "Star" Hand Grenade Fire Extinguisher, all of which were completely successful. The first trial was upon a large pine-wood chimney, 20 feet high by 18 inches in circumference, painted inside thickly with tar. The wood and shavings at the bottom were set fire to, and in a few moments a large sheet of flame was belching forth from the top of the chimney with the roar of a reverberatory furnace. The operator then approached towards the impromptu fire-grate with two hand grenades. Breaking the one against the other into the fire, the liquid, at once volatilising the gas, passed up the chimney with the draught, and completely extinguished the fire. The next experiment was made on a wooden structure eight feet wide and twelve high, painted with tar. Dry pinewood was then thrown in, and the whole squirted over with kerosene. Soon after it was lighted, the whole mass became one body of flame, and to the spectators, aided as the fire was by a very high wind, it seemed doubtful if the fire could be extinguished. The demonstrator, with the aid of an assistant, took up a position on each side of the burning mass, and threw in a hand grenade. The fire was at once considerably lessened, but owing to the high wind and inflammable nature of the materials, it took three grenades to completely put it out. The success of these trials, together with others I have witnessed, enable me to recommend the use of the Harden "Star" Hand Grenade as being particularly useful and valuable in all barracks, hospital and military stores, and all large public buildings.

EDITOR.

# REVIEWS OF BOOKS SUITABLE FOR NAVAL AND MILITARY LIBRARIES.

The Art of War in the Middle Ages, A.D. 378-1515. By C. W. C. OMAN, B.A., Fellow of All Souls' College, Oxford. With maps and plans. London: T. Fisher Unwin, 26, Paternoster Square.

This work is the Lothian Prize Essay for 1884. In the first chapter, which treats of the transition from Roman to mediæval forms in war (A.D. 378-382), there is an interesting account of the battle of Adrianople—a victory of cavalry over infantry—the very reverse of what we are now witnessing in the Soudan, and gives a good account of the rise and formation of cavalry by Theodosius, on whom devolved the task of re-organising the troops of the Eastern Empire. The next chapter treats of the Early Middle Ages, extending from A.D. 476—1066-81, from the fall of the Western Empire to the battles of Hastings and Durazzo, and considering that the state of the art of war in the Dark Ages has to be worked out from monkish chronicles and elsewhere, the author has managed to write a very readable chapter and which shows much archæological research and industry, although as the author naïvely writes, "It is fortunate that the general characteristics of the period render its military history comparatively simple. Of strategy there could be little in an age when men strove to win their ends by hard fighting rather than by skilful operations, or the utilising of extraneous advantages." This is a very interesting chapter, showing how the supremacy of cavalry was finally established by such battles as those of Hastings and the defeat of the Varangian guard by the Norman cavalry. Then follows an account of Byzantine strategy, and the arms, organisations, and tactics of the Byzantines (A.D. 582-1071), a chapter full of interesting matter. The next period extends from A.D. 1066-1346, from the battle of Hastings to the battles of Morgarten and Cressy, giving a full account of the supremacy of the mail-clad feudal cavalry—an epoch which, as the author observes, "is, as far as strategy and tactics are concerned, one of almost complete stagnation." The next chapter treats very fully of the Swiss, extending from A.D. 1315-1518, from the battle of Morgarten to the battle of Marignano, a series of chapters which commend themselves to every military scholar, and by their clear description show how "in the fourteenth century Infantry, after a thousand years of depression and neglect, at last regained its due share of military importance." The English and their Enemies form the concluding chapters of this admirable essay, A.D. 1272-1485, from the accession of Edward I. to the end of the Wars of the Roses, in which the use of the long bow is shown to be the key to the successes of the English armies in the fourteenth and fifteenth centuries, as in the previous chapter the pike was to the successes of the Swiss. We have thus briefly outlined the scope and extent of this essay, which discusses the two systems of tactics which played the chief part in revolutionising the art of war in Europe. We congratulate Mr. Oman on the success he has achieved, in that the whole essay evidences the erudition and painstaking inquiry of a writer, whose book will not only be read by the military student, but will be regarded as a reference of no mean authority by historical writers. It evidences on every page careful research, and the talent

which Tacitus possessed to describe battles. Mr. Oman need not be afraid to again enter on the field of military history, he will meet with a respectful, not to say hearty welcome.

Regimental Records of the Bedfordshire Militia, 1759 to 1884. Sir John M. Burgoyne, Bart. London: W. H. Allen and Co., 13, Waterloo Place, S.W.

THESE records have been very carefully compiled, and illustrate in an interesting manner the loyal services of this fine old regiment. Young soldiers of the present day and militiamen in particular will read with surprise and interest the long marches made by this regiment, before railways were introduced, and the length of time it was embodied—on the fourth occasion from 1803 to 1815, eleven years and two months, and their sixth or last embodi-ment from 1857 to 1861. This regiment has done good service to the State as these records show. The work has evidently been a labour of love to the gallant colonel, and we regret being obliged to take exception to the following paragraph: "There can be no doubt that militiamen much dislike being under canvas, and should never be ordered there unless absolutely necessary." This sounds so unlike anything else that is written or recorded in the volume, that we would fain hope it is an error. Tent life is essentially part of a soldier's existence, no matter what branch of the service he may belong to, or in what quarter of the globe he is ordered to, and no greater illustration of the attractions and popularity of camping out are to be seen than at Wimbledon or Aldershot. With the new organisation the Bedfordshire (Light Infantry) Militia changed its old designation and became 3rd Battalion Bedfordshire Regiment, and the facings were changed from dark green to white. There is an appendix giving tables of the lists of officers who have belonged to the regiment, and one showing the number of men who have volunteered in each year to the regular army, which evidences in the most unmistakable manner the soldierlike spirits that animate the men of this regiment. Colonel Burgoyne has cleverly contrived to convert a mass of dry details into a very interesting narrative, and evidently has an attachment for the old regiment—the name of which he retains—Bedfordshire Militia—while the book is characteristically bound in "red with dark-green facings."

Phillips's Special Large Scale Map of the Approaches to Khartoum, 1885. Price Sixpence. London: George Philip and Son, 32 Fleet Street.

THIS is one of the best maps that has yet been published in connection with the War in the Soudan. It is corrected up to the moment of going to press. The route taken by General Stewart and his troops across the desert is shown, and at the Abu Klea Wells is marked the date, January 17th, 1885, one that will be long cherished by British soldiers and Englishmen. There is also added on the same sheet a map of the environs of Khartoum, showing the exact position of the Palace, barracks, Government House, market, mosques, &c. When reading the war corre-

spondent's letters, their interest will be much enhanced by having this excellent and cheap map to refer to, which will enable everyone to understand—we were going to say watch—the daily movements of the troops towards Khartoum.

Charles Dickens as I knew him; the Story of the Reading Tours in Great Britain and America (1866-1870). By George Dolby. London: T. Fisher Unwin, Paternoster Square.

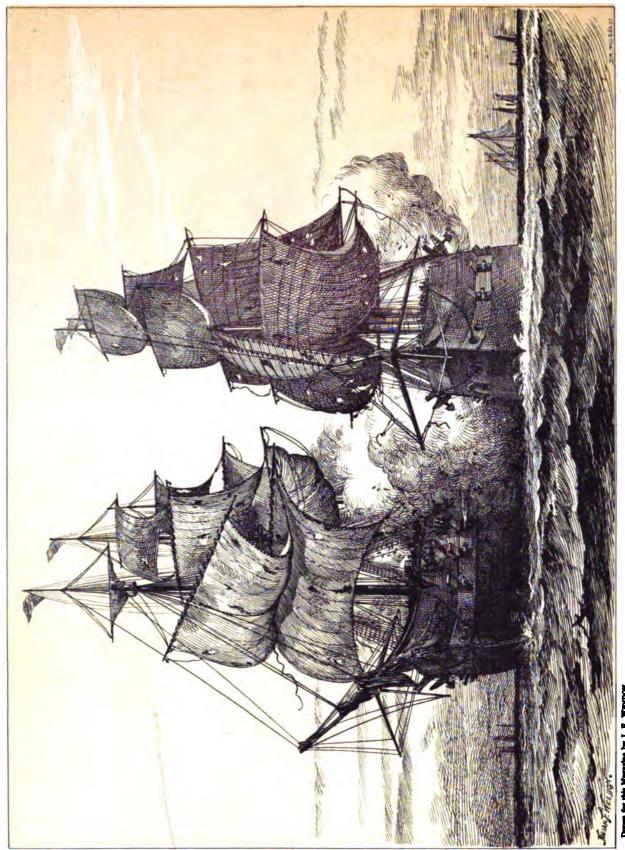
THE reading tours of Charles Dickens cannot fail to interest a large circle of readers, as they afford an insight into his life which is not to be found elsewhere so freely described, neither in Foster's Life, or the subsequent Letters published by his daughter. Mr. Dolby has written an honest and straightforward account of the great humourist, which he, had he been living, would have been the first to acknowledge. Mr. Dolby proves himself to be an excellent manager, who thoroughly knows how to meet and overcome difficulties. The American Tours is well written, and worth reading. It shows up very characteristically one or two phases of American manners and customs. In the course of the book we have come across one or two speeches we do not remember to have met elsewhere. The

account of Charles Dickens's audience with her Majesty is told with exceedingly good taste. There are many of Dickens's admirers who will gladly welcome the volume as an agreeable addition to his works, while future biographers will feel indebted to Mr. Dolby for the additional light he has thrown upon Dickens's character, habits, and indefatigable industry.

W. and A. K. JOHNSTON, the well-known geographers, have published a sheet of maps to illustrate Sir C. Warren's commission to South Africa. To those who are interested in the result of Sir Charles's commission, they will be found a handy reference. Those who are proceeding to South Africa, as colonists or otherwise, cannot do better than procure one of these excellent maps. The price is one shilling.

WE have received a copy of the Staffordshire Advertiser Military Almanack for 1885, well got up in sheet form, giving, not merely the fullest information as to the military forces of Staffordshire, but many details specially valuable to Volunteers. Major Mort has evidently bestowed the greatest care on the compilation of this Almanack, which is published at the office of the Staffordshire Advertiser.





nava for this Magazine by J. F. Witzmore.

THE FIRST FIGHT OF THE SAUCY ARETHUSA. 18" JUNE, 1778

# THE

# ILLUSTRATED Aabal and Military Magazine.

No. 10.

APRIL 1st, 1885.

Vol. II.

# OUR FRONTISPIECE.

# THE FIRST FIGHT OF THE "SAUCY" ARETHUSA.



T is not perhaps generally known that June 18th can be considered a redletter day in English naval annals, as well as in English military records. The battle of Waterloo has, of course, a wider historic fame than that to which a little sea-fight could

lay claim, but yet that little sea-fight was a very brilliant affair, and one of which England had every reason to be proud. The "dust of the years" hides unfortunately many a deed of individual daring under "oblivion's creeping pall," but now and again some searcher into the records of the past finds a treasure in the shape of a story of heroism, and brings it again to light for the instruction and example of posterity.

Our frontispiece in this number illustrates with the touch of the artist, a story which has been saved from the dust of neglected archives by the research and industry of a writer, whose labour of love has long been to chronicle the brave deeds of British heroes ashore and afloat. The story is one of striking interest and incident.

It was on June 17th, 1778, when the American colonies were in revolt against the mother country, that France thought she saw a way of striking a blow at England by giving her assistance to the side which seemed to be engaged in a death-struggle with her old rival. The whole society of France was seething with the hidden forces which were soon to burst forth in the Great Revolution—men's passions were stirred to the utmost against the existing state of things at home, but no passion was then stronger amongst the French people than the hatred which all classes felt against England. War was the necessary outlet for this temperament, and it promised to be a most popular war, France being proud in the confi-

dence of her maritime strength, and England being avowedly weak. But war had not yet been declared. The English Admiral, Keppel, with fifteen ships of the line, was watching the harbour of Brest, where the French fleet had assembled, with a view, it was supposed, of issuing out to strike a sudden and terrible blow against England's naval and commercial prestige. Upon the morning of the day in question, three heavily-armed ships came out of Brest harbour and made sail around the Admiral's squadron, with a view evidently of ascertaining its strength in men and guns. Keppel, in self-defence, determined to detain if possible his inquisitive visitors. With this object he directed several of his ships to surround the three Frenchmen. The America, one of the Admiral's squadron, commanded by Captain Lord Longford, drew near to one of the French line-of-battle ships that was endeavouring to steal away. His lordship politely communicated with her commander. In reply, the Frenchman fired a furious broadside into the America. On an explanation of this treacherous conduct being demanded, the French ship, the Licorne, hauled down her flag and surrendered! The explanation given by her captain for this extraordinary proceeding was, that surrender was of no consequence to him, as the French fleet in Brest, numbering some thirty first-class ships, would speedily come out and re-capture his vessel. Whilst this proceeding was going on, one of the three French frigates, La belle Poule, put on all sail and made off. Admiral Keppel signalled to the Arethusa to give chase, an order which was immediately obeyed. The Arethusa was one of a set of frigates which had been lately built on more modern lines, and better adapted for quick sailing than the older and heavier ones. She carried twenty-four six-pounders and a crew of 300 men, commanded by Captain Marshall, as good and gallant a sailor as ever trod a quarter-deck. The French ship mounted twenty-four twelve-pounder guns, and was manned with a crew of 500 hands. The chase lasted

throughout the night, but towards the morning the Arethusa began to overhaul her opponent, who, seeing at last that flight was useless, took in sail and allowed the English pursuer to come within hailing distance. The English captain called out the message from his Admiral that the Frenchman was to return—but the answer, as in the case of the Licorne, was a murderous broadside. Marshall did not hesitate a moment as to what he should do. His larboard guns rang out immediately an iron reply, and then ensued one of the fiercest and most sanguinary single sea-fights on record. The Frenchmen were brave and had the advantage in numbers of men and weight of metal, but the Englishmen had "hearts of oak" and never thought of the odds against them. Broadside to broadside, the little Arethusa had more than once to receive the full fire of her enemy, but by the skill and coolness of her commander she twice managed to sweep the Frenchman's decks fore and aft. The fierce fight lasted for forty minutes, during which time the Arethusa was terribly damaged by the weightier metal of her foe, but with mizen yard shot away and mainmast tottering, she held on to the unequal combat until, through sheer British pluck and determination, she hulled the French frigate many times below the water-line, smashing several of her port-holes into one and dismounting the greater

number of her guns. The French captain came at last to the conclusion that the battle was not to the strong, and as his rigging and running gear were still in working order, he gradually worked his ship out of gunshot and wore in towards the shore. His vessel sank, however, as she was assisted into a small bay by the aid of some fishing-boats, which came to her aid to tow her into a position of safety.

The Arethusa, however, still "walked the waters like a thing of life," and although terribly damaged, managed to return to the Admiral and "report." She afterwards became that "Saucy" Arethusa so celebrated in battle and in song.

The facts upon which the picture has been designed and sketched have been taken from a well-told tale given a few years ago to a contemporary magazine by the graphic pen of Major W. J. Elliott. He obtained them from Admiralty records, they are therefore authentic; but he adds: "The yellow-leaved and brown-stained log of the Arethusa, discoloured with the lapse of over a century of time, tells the tale of her first fight in modest manner. Such indeed was always the way the gallant men of those days put on record their deeds of bravery. Newspaper correspondents and sensational paragraphists were then unknown."



#### ANNIVERSARIES OF BRITISH VICTORIES.

"JELLALABAD."

THE defence of this place, successfully maintained from the 12th of November, 1841, by Sir Robert Sale with the 13th Light Infantry, the 35th Bengal Native Infantry, a company of Bengal Artillery, and the 5th Bengal Cavalry, ended with the advent of the relieving force under General Pollock on the 16th of April, 1842. To describe the stirring incidents of this siege would fill a volume, but there is only space here to note a few of them.

Vigorous and successful sorties were made on the 14th of November and 1st of April. One day in the beginning of 1842, a solitary horseman was seen approaching. He was weary and wounded, and could hardly cling to his tottering pony. This was Dr. Bryden who had escaped alone from the Kabul disaster. He was eagerly assisted, and soon restored to health, and served in another campaign eleven years later. On the 19th of February a violent

earthquake threw down the parapets and ruined the defences in many places, destroying in a moment the labour of months. Sale's undaunted soldiers at once began to repair the damages, and worked so hard that in a month the place was as defensible as before. Successful sorties, made on March 11th and 24th, and April 1st, attested the efficiency of the garrison. On April 7th nearly all the force marched out, and utterly routed Akbar's army, but this victory was attended with the loss of the gallant Dennie.

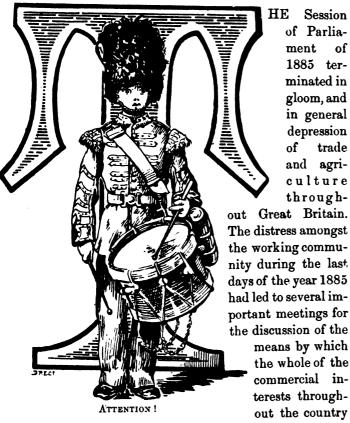
The valour and endurance of the defenders of Jellalabad are still well known and appreciated, though forty-three years have passed since the hardly earned "Mural Crown' was granted to the 13th, a badge extended by recent reforms to two Militia Battalions, and worn probably by three Volunteer Battalions also.

E. O'CALLAGHAN.

# ENGLAND'S NEXT CAMPAIGN.

#### BY LIEUTENANT-GENERAL A. WARNING.

#### POLITICAL SITUATION.



might be improved. The discussions led to no practical result, because the disastrous aspect of the affairs of the British Empire, and the loss of confidence consequent upon the general depression of commerce through numerous heavy failures in mercantile firms, had shut up almost every class of enterprise. Enormous sums of money were lying idle in the vaults of large banking establishments, owing to the possessors of capital preferring loss of interest, rather than loss of invested money in undertakings started with the object of creating a fictitious market. Bankers and others could find no outlay for the employment of their own capital or that of their clients. Stockbrokers were living on each other by fictitious trade in almost every class of stock or security. Failures in commerce generally had shaken faith in legitimate trade. The prospects of the farming community had dwindled to nothing, and farmers were rapidly leaving the country to seek for a living elsewhere. The value of land was seriously depreciated, the incomes of landlords were greatly curtailed, causing a diminution of personal expenditure and a consequent loss of circulation of money amongst the

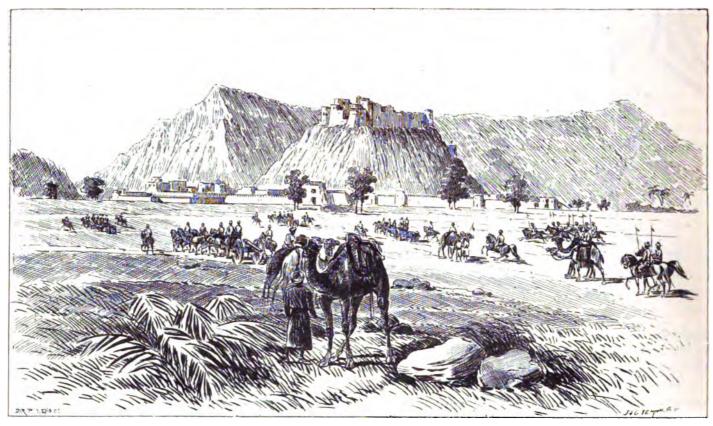
people. Retail dealers throughout the kingdom were barely able to meet their expenses. The bank rate of discount had fallen to 3 per cent.

Parliament had opened with the intention of carrying out several propositions connected with internal policy, and for the completion of the extension of the Franchise foreshadowed by the Bill of 1884. Except the Franchise measure, the governmental intentions had been thwarted by the action of the Irish party of disunion, which had, as usual, frittered away the time of the Session in faction fights and obstruction of the most serious character. The Opposition had contended hotly against the governmental measures and general foreign and colonial policy. Many terrible political fights and scenes had taken place on the floor of the House of Commons. Party spirit had run riot during the Session. The strife of political parties had taken the place of a consideration of the best interests of the Empire. Foreign affairs of the most important nature had been lost sight of or entirely neglected, in furtherance of political party schemes. Foreign Governments, seizing their opportunity, had pressed forward in a most threatening manner their claims to colonial territory contiguous to or actually upon ground held by British traders or occupied by British settlers. Concession after concession had been made, to only further encourage foreign aggression of an insolent and threatening character upon British Colonial possessions.

The dangerous state of affairs in Egypt had been increased by the unsuccessful termination of the British campaign undertaken against the Mahdi in the early part of the year, through the untimely end of the neglected General Gordon, and by a loan of £9,000,000, guaranteed with the sanction of certain Foreign Powers who had succeeded in obtaining from the Liberal Government a seat upon the Board for the management of the Egyptian Public Debt. The loan, although taken up with some degree of confidence, was, even at the end of 1885, in serious danger of depreciation through the interference in general Egyptian affairs of the Foreign Powers who had forced their representatives upon the Board of the Egyptian Public Debt. The autumn of 1885 saw the British troops in the act of preparing for a renewal of the operations for entirely "smashing" the Mahdi which had signally failed in the spring, owing to the arrangements of the Liberal Government for the relief of General Gordon having been "too late," and to the fact that the Suakim-Berber expedition had also failed to completely "smash" the Mahdi, who still kept the field with a considerable force.

French and other intrigues in Egypt were, at the termination of this year, as rampant as they had been in previous years. That part of the Soudan which had been given up to the Mahdi and his fanatical followers in the spring of 1885 through failure caused by the "too late" policy of the Liberal Government, had been the scene of bloodshed and the most terrible anarchy and confusion. The Mahdi, with fire and sword, had swept away the inhabitants of whole districts which had either opposed him or given assistance to the British during the previous campaign. The taunts of blood-guiltiness thrown at the head of the Government by the Opposition, consequent upon the terrible loss of life that had taken place in the

The condition of Ireland and the attitude of the Irish population of Great Britain and the Colonies were causing the most serious apprehension throughout the whole of the British Empire. The dynamite operations of the Irish secret organisers for the destruction of life and property in the beginning of the year, with the object of forcing the English people to recognise the independence of Ireland, had been repeated during the autumn with a terrible violence. The perpetrators of acts of outrage of a fearful nature had been, as usual, undiscovered. The Irish population were gloating over deeds of Vandalism which completely surpassed those of the spring, and Irish sympathisers were again openly proclaiming the



QUETTA.

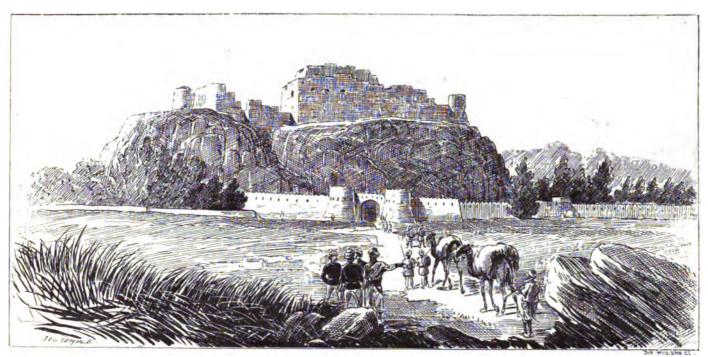
Soudan through the Liberal policy of "scuttle out" and "laissez aller," had been hurled back by Government supporters, with a virulence instigated by party strife to retain office at the cost of any degradation or sacrifice of human life, or of British interests. Egyptian affairs generally were at the end of the year in a most unsatisfactory and insecure condition, and were causing the gravest anxiety amongst every class of the general community, owing to the likelihood of their involving Great Britain in serious controversy with certain Foreign Powers anxious to gain a permanent footing in the management of Egypt, with ulterior objects of a most serious character to the interests of the British Empire.

dynamite warfare upon British life and property of every description. Agrarian atrocities of a horrible description were again rife in Ireland, in which country life and possessions were in the greatest danger of secret destruction. Mr. Parnell, the champion of Irish rights and privileges, by his continued silence upon the nature of the warfare upon the English race, upon the rights of property, and upon British institutions, was tacitly encouraging Ireland to open rebellion. No less than 31,000 troops of all arms were in Ireland for a suppression of an outbreak against the Government. These troops were supported by over 22,000 police and constabulary. The troops were harassed by constant marches from district to district in

suppression of outrages; the police and constabulary were almost exhausted by incessant vigilance and search for arms and ammunition, which, notwithstanding all their efforts, were continually finding their way into the disturbed country. Agriculture in Ireland was at a standstill, landlords were held at open defiance, rents were withheld, evictions were constant, and the distress throughout the whole of the disaffected districts was such as had never before been experienced.

While the affairs of Great Britain were in progress towards this serious condition at home, in the Colonies, and in the neighbourhood of the Mediterranean and Red Sea, a storm-cloud had been forming in a distant land, whose sultry elements required but the generation of a spark to burst far and near with a frightful violence, and

which Great Britain would be again enabled to bring a considerable body of troops from India to the Mediterranean to thwart Russia's attempts to get possession of Constantinople and the greater part of the Turkish Empire. The resolve of Russia to give the fullest employment to the whole of the Indian native troops, and to a large British army in India, at the moment she was ready to strike for the possession of Constantinople, had been shown by her insidious yet firm advances in Turkestan and beyond the shores of the Caspian towards the confines of Afghanistan, during the last few years. Although these advances and their obvious object had been pointed out by several eminent writers, and by several organs of the British Press, the Government of the period had persistently disavowed to the British people Russia's intentions, with the object of



CANDAHAR GATE, QUETTA.

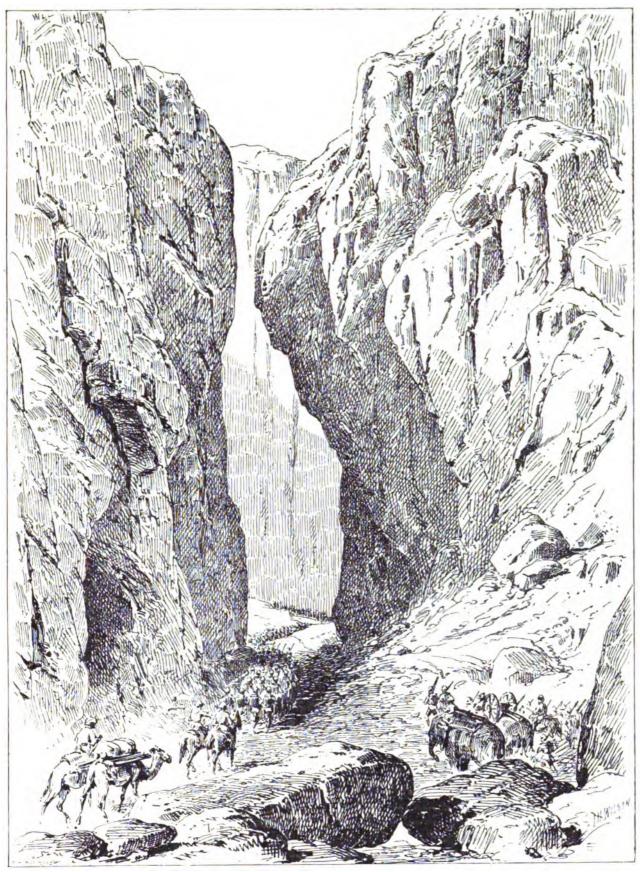
shores of England. For some years past, owing to the conduct of Statesmen who had neglected the true interests of the British people to indulge in party strife for place and power, Russia, true to her traditions of rapacious conquest, had been once more silently and secretly making vast preparations to obtain Constantinople and the greater part of the Turkish Empire, so that she might gain possession of a position behind which she might build vast fleets, and ultimately, either alone or in concert with other Powers, successfully fight Great Britain for the possession of her great sea-highway to India and to her Colonial possessions, and reduce her to the position of a third-rate Power. Russia had determined that the action of that far-seeing Statesman, Earl Beaconsfield, should not be repeated, by

suppressing a public alarm which would have compelled the Government to reverse the policy to which it had pledged itself in the political campaign by which Mr. Gladstone had brought himself into power. This policy was, in the main, the reversal of that of his predecessor in Afghanistan, and the evacuation of the city and fortress of Candahar and of all important points of advantage and observation obtained in that country at a vast expense of British blood and treasure, through the necessity of forcing the withdrawal of a Russian military force established at Cabul by an intrigue with the late Ameer. Notwithstanding all the efforts of British officers and others who had penetrated to Central Asia and obtained exact information respecting the ultimate designs of Russia towards India, and of those patriotic writers who had perseveringly drawn attention to

Russian designs, the British Government of the period had neither remonstrated with the Russian Government nor had taken proper steps to meet its designs upon Afghanistan. Russia had been keenly watching the party strife for place and power by British Statesmen. She had been long and carefully studying the difficulties of those Statesmen caused through the Egyptian, the Irish, and other Home and Colonial questions. Russia had swiftly taken advantage of British public opinion being occupied with these questions, to rapidly push her conquests towards Afghanistan, to occupy strong strategical posts, and to place her outposts within a few miles of Herat, the gate of India. She had by degrees, through the possession of the oil region of Baku, established an immense flotilla of first-class steamers, for the conveyance of oil in time of peace, and for the transport of troops and munitions in time of war. She had established a place of arms and debarkation from the Caucasus at Michaelovsk. She had energetically constructed a line of railway from this place to Askabad, and was making enormous efforts to push the line towards Sarakhs, which place she had seized, rapidly armed, and converted to a strong depôt for provisions and stores, for the use at an opportune moment, of an invading army against Afghanistan. The British Government of the period, always reliant upon the faith of Russian promises that Afghanistan was outside the sphere of Russian interference, or wilfully shutting their eyes to the danger of Russian advances towards India, had, in the latter part of 1884, gone through the farce of sending out a British military Commission to define a clear Afghan boundary in conjunction with a Russian Commission. After its sojourn during the winter—a period spent in doing nothing, and after various intrigues to gain possession of a permanent footing well within Afghanistan itself, and as close to Herat as possible, a definite boundary was rapidly struck. The British Government shamefully allowed to be included within this boundary the positions seized by Russian officers in the spring of 1885. After the settlement of some minor points, the British Commission was at the request of the Russian Government ordered to be withdrawn from Afghanistan. The order was carried into effect, and the Commission with its escort was dispersed. The Russian force in the Merve district then commenced to push its outposts beyond the defined boundary close to Herat, and to establish heads of attack near to the city and fortress. The railway to Sarakhs was then still more energetically proceeded with. The positions of the Russian outposts and heads of attack beyond the defined boundary and quite close to Herat, were not discovered by the Indian or Home Government until the Russian forces had firmly established themselves. As soon as the position of these outposts became known, the greater part of the British Press took up the question, and urged upon the nation the propriety of inquiring into the Russian right to penetrate beyond the boundary which Great Britain had honourably defined in conjunction with the Russian Govern-

ment. The British Government of the day at first pretended that Russia's intentions towards Afghanistan and India were perfectly honest; but a storm of indignation from almost every quarter of the kingdom compelled the Government to abandon the idea of hoodwinking the British people to the serious danger of India, and forced the Ministry to ask Russia to withdraw her outposts within the boundary. Russia stated that the outposts had been pushed forward to protect some of the inhabitants in the Herat districts, who had asked for protection against marauders. An investigation of this statement proved it to be entirely false. This was pointed out to Russia. She then stated that her outposts having been placed in their positions by her military commanders, she could not withdraw them without a loss of prestige. Information reached the country that Russian military officers had been for some time past surveying and reporting upon the condition of the roads from Sarakhs to Herat, with the object of ascertaining the immediate practicability of an advance of all arms of the Russian force in the Trans-Caspian district. Threatening movements of Russian troops in Turkestan towards the Oxus were also reported; and it had been ascertained that Russian officers had obtained a thorough knowledge of an easy line of march for troops of all arms from Balkh to Cabul. It also transpired that certain Russian officers of rank, under the guise of traders, had been for nearly two years traversing the whole route from Turkestan to Cabul, and had placed in the hands of General Kaufman an accurate description of the entire route. They had also succeeded in procuring the correct routes from Cabul to Jellalabad and the Khyber Pass, together with descriptions of the whole of the strategic and other points necessary to seize for the purpose of gaining entire possession of this pass by a Russian armed force.

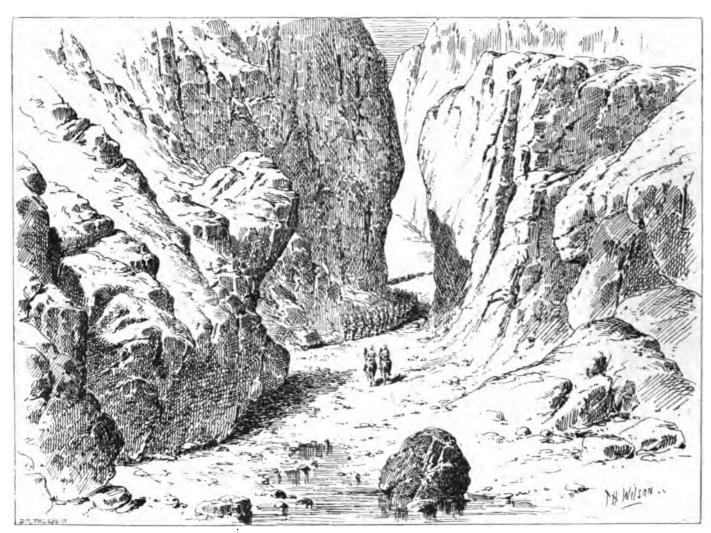
The British Government, forced out of its supineness and gross neglect in relation to Afghan affairs, and urged by the Press and by the voice of public opinion, strongly remonstrated with Russia upon its want of faith in respect to its advances towards the confines of British India, and upon its open defiance of the boundary line struck in combination with its own authorised officers and agreed upon between the two countries. Russia at first answered with evasive replies, and continued to make more ample preparations for the eventuality of war, by concentrating 7,000 soldiers close to Herat. Pressed still more strongly by the British Government, Russia sent a reply of an insolent nature, advanced her 7,000 men near to Herat, and sent an additional 20,000 to the Trans-Caspian district. Russia suddenly followed up these movements by seizing Herat, and commenced to swiftly move troops towards Sarakhs from her Trans-Caspian base at Michaelovsk; made arrangements for pressing into her service the enormous flotilla of steamers for carrying oil from the Baku wells, and set in movement a large portion of her troops in the Caucasus towards the Caspian. The British public, highly excited now



ENTRANCE TO THE BOLAN PASS, FROM DADUE.

at the movements of Russia towards India, demanded a corresponding advance of British-Indian forces towards Candahar, a Russian evacuation of Herat, and a backward movement of Russian troops to the frontier of Afghanistan recently defined between Great Britain and Russia. The British Government consequently gave orders for the assembling of a British-Indian force, and its concentration in the neighbourhood of Quetta and the Bolan Pass. The Ameer of Afghanistan's consent was requested for the occupation of Candahar by British troops if found necessary. He demurred to its occupation by a British force, and offered

observed to be taking place between France and Russia concerning the condition of Egypt; and it was reported that a secret convention had been signed between these two Powers. By this convention, Russia, under certain stipulations, was stated to have bound herself to support French intrigues and interests, having for their object certain rights over the possession of the Suez Canal, and an active interference in Egyptian administration generally. The French Press thereupon became so insolent in its language, and the intrigues of France in Egypt so active and apparent, that it was found necessary to form as



THE OPENING INTO THE NARROW PASS, ABOVE THE SIRI BOLAN.

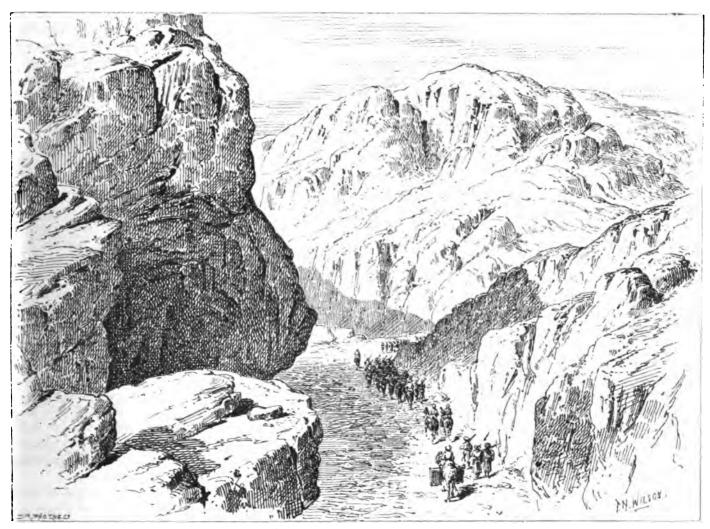
to hold it in British interests. He was informed that Candahar would be temporarily occupied by her Majesty's troops if found advisable. The Ameer thereupon sent 2,000 men to support the British authority, concentrated a force of 5,000 men, with guns, at Ghuzni, and spread an additional 10,000 between that fortress and Ghilat-i-Gilzai, the nearest strong position to Candahar on the route to Cabul, at which city a reserve was rapidly organised.

Events followed on with astounding rapidity. Towards the end of February, 1886, a strong rapprochement was

large a fleet as possible for the protection of British interests in the Mediterranean and Red Sea, particularly for the security of British shipping passing to and fro in the Canal. It was now announced from the Baltic that Russia was arming and equipping her war-ships in the dockyards of that sea with the utmost rapidity. The British Press on becoming aware of this, insisted on the British Government putting in hand the repair and equipment of the whole of the Reserve ships in Plymouth, Devonport, Sheerness, and Chatham. The Government

responded by giving the order; but found itself met with serious difficulties, in consequence of the defective condition of the whole of its Reserve of war vessels. Russia for several years had been making extraordinary efforts to strengthen the fortress of Sebastopol as a base of operations against the city of the Sultan and the Bosphorus. It had been pointed out some time previously that Russia was on the point of completing her railway system to Sebastopol—that she had been transporting to that fortress vast quantities of materials of war and shipbuilding materials, and that

which would arise owing to an outbreak of war on the confines of the British Indian Empire, to the weak and inefficient condition of Great Britain's active army, and to the fact that it was necessary to retain portions of this army over an extensive area in Ireland, in Egypt, and over various other quarters of British territory abroad. Germany and Austria being sounded by the British Government in relation to Russia's designs generally, replied that their position was one of non-interference; yet it was obvious to clear-sighted Statesmen, that these Powers were merely



THE WILD PASS OF SIRI KAJOOR, BOLAN.

there had been a concentration of Russian troops taking place in the neighbourhood of Odessa. It was known that Russia had at Sebastopol, secretly built and prepared ready for immediate action, several ironclads and swift cruisers of a formidable character; in fact, that Sebastopol was once more armed, strengthened, and ready as a powerful base of operations against the Turkish Empire the moment a war opened in Afghanistan against Great Britain. Russia was now known to be quite aware that Turkey could not rely on England for the slightest assistance, through the serious political and other complications

waiting on the progress of events between Russia and Great Britain to decide on their future course of action in reference to the Turkish Empire. Italy rapidly strengthened the positions in the Red Sea which she had obtained by an understanding with Great Britain in the early part of the year 1885, and concentrated in that sea a heavily-armed squadron of ironclads and armed cruisers.

#### NAVAL AND MILITARY SITUATION.

The armour-clad strength of the British Navy at the end of 1885 consisted of 59 battle ships, with a total

displacement of 385,000 tons. That of the French Navy consisted of 48 armour-clads or battle ships with a total displacement of 258,900 tons. The strength of the Russian Navy in ironclads was 33, total displacement 103,900 tons; of Germany 24, total displacement 96,300 tons; of Italy 13, total displacement 64,000 tons; of Turkey 18, total displacement 59,600 tons; of Austria 12, total displacement 33,400 tons.

The number of torpedo vessels of every class in the possession of each Power was: England 110, France 130, Germany 150, Russia 120, Italy 75, Austria 50, Turkey 20.

Owing to the serious aspect of affairs at the beginning of the year it had been found necessary to dispose 18 firstclass ironclads, 10 cruisers, 6 gunboats, and 8 first-class torpedo boats in the Mediterranean, Red Sea, and Indian and colonial stations; 16 first-class ironclads, 6 cruisers, 8 gunboats, and 10 first-class torpedo boats to form a Channel fleet; and 12 first-class ironclads and cruisers in defence of home and the coast-line. The Government, anxious to employ a strong squadron for observation of Russian movements in the Baltic, gave orders for the formation of the squadron from the Reserve ships in the harbours of Portsmouth, Devonport, Sheerness and Chatham. An inspection of these ships found the greater part of them in a most defective and unseaworthy con-With the greatest difficulty only seven ships of the second-class could be selected for equipment, and workmen were immediately engaged to bring them forward or arming as rapidly as possible. It was, however, estimated that it would take at least three months before they could be ready for service in the Baltic. It was with the utmost difficulty that the Admiralty was able to find seamen to man the ships in the Mediterranean, the Red Sea, the Indian and Chinese Seas and the Colonial Stations and for the Channel fleet—so serious had been the neglect of adequate arrangements to meet the necessities of the country at a probable period of war. The defects of the organisation for the provision of seamen for the wants of the Royal Navy became so obvious, that they called forth from all quarters the severest censures on Admiralty administration. The mercantile marine was called in to assist the authorities, and responded with an alacrity which won the admiration of the entire nation. The sacrifices which this marine made to meet the national necessities in seamen were so severe that they seriously crippled the resources of shipowners and the seagoing community. Foreign sailors in large numbers had to be called into nearly every branch of the mercantile service of Great Britain, to the serious inconvenience and want of dependence of mercantile ship captains upon the qualities of their seamen. Turkey, seeing the threatening aspect of affairs surrounding her territories, made an urgent appeal to Great Britain for at least naval assistance to ward off any attack upon Constantinople from the neighbourhood of the Black Sea, and prepared for the eventuality of having

to meet a large Russian force advancing from the Danube and from the side of Armenia. The British fleets were at this time fully occupied in the defence of British interests in the Mediterranean and Red Sea, and along the routes to her Colonies and in the neighbourhood of the English Channel. The Admiralty was entirely absorbed with the preparations for the advancement of Reserve ships. Great Britain found it impossible to render to Turkey the help she required. The Ottoman Porte was thus left with a bankrupt exchequer, and completely isolated in its defence against any attack by its powerful neighbour.

The military situation was even more desperate. Inquiries set on foot at this particular juncture developed the fact that Russia had concentrated in the Caucasus no less than 220,000 well-armed and well-equipped troops of all arms ready for immediate action, with the object of supporting a Trans-Caspian operation towards Afghanistan. Her flotilla of oil-vessels, from 1,500 to 2,000 tons burden, now numbered 180. She had also in the Caspian twelve heavily-armed gunboats of superior speed and strength. Her troops, écheloned along the railway line from Michaelovsk to a point within 320 miles of Herat, and from thence to Herat, now numbered nearly 35,000 soldiers, with an ample complement of field and siege guns. These numbers were being rapidly added to by arrivals from the Caucasus command. Depôts of war munition along the Trans-Caspian route to Afghanistan were said to be replete with every requisite for the commencement of a severe campaign. The line of railway that was in course of completion from Michaelovsk to Sarakhs was now known to be capable of conveying 6,000 men per day, with corresponding munitions of war. The Russians were rapidly making the road from Sarakhs to Herat open and free for the passage of all arms of her military forces. A large portion of her army in the Caucasus was stated in the beginning of March to be rapidly on the move towards the Caspian, and her entire flotilla of oil-vessels to have been impressed for the conveyance of men and materials across that sea to her new base of operations against Afghanistan at Michaelovsk.

The British army at this period was widely distributed. The force in Egypt at this period consisted of 20,000 men of all arms, distributed at Khartoum, Berber, Suakim, Korti, and along the lines of communication between Upper and Lower Egypt and the Red Sea. So serious was the condition of affairs in Upper and Lower Egypt that not a British soldier could be spared from that country; further, it was clearly apparent that there was even a strong necessity for strengthening the British forces in Egypt. The British military force in the Mediterranean was 11,590 men, at the Cape 4,090 men, in India 60,500 white soldiers and 137,880 native troops and European volunteers of all arms. In Ireland there were 31,000 soldiers of all arms, in England and Scotland 73,350 troops, and but 15,000 Reserve soldiers remaining to

be called to the colours in a period of national necessity. The regular battalions at home were found to be in a most attenuated condition. The greater part of the home battalion soldiers were found to be mere boys of deficient physique and capacity; in drill and military knowledge they were found to be utterly unfitted for the requirements of active service. No single home battalion could be found to make up an efficient brigade-unit ready to take the field.

The native population of India became highly excited at the prospect of an advance of Russia to the confines of the Indian frontier on the north-west. A number of various directions in India, necessitating the employment of considerable bodies of troops to maintain tranquillity and order throughout the British Indian Empire. So imperious were the Government requirements for these services, that it was found impossible to concentrate upon the Indus for a march towards Candahar through the Bolan and Kojak Passes more than 35,000 men of all arms to resist a Russian invasion of either Afghanistan or India proper, together with the transport and impedimenta. Divisions and brigades were formed with much difficulty, and the British force was concentrated as rapidly as possible at Quetta. The command of an Anglo-Indian



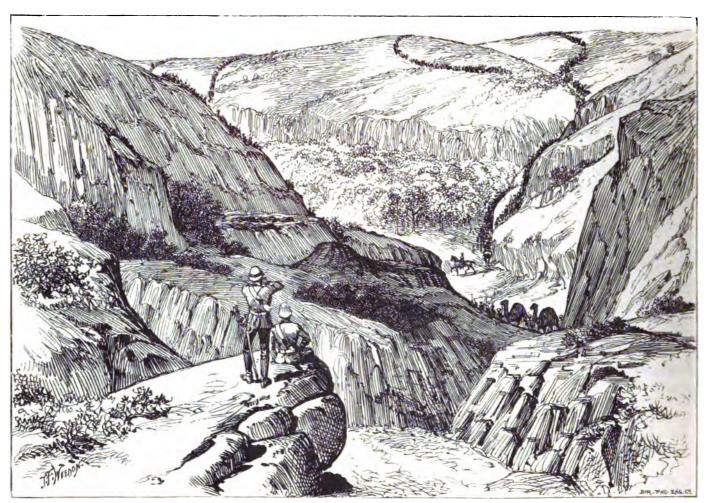
MOUNTAINS OF KIRTA, NEAR GURM, BOLAN PASS.

powerful Indian princes, holding their possessions under British supervision, showed unmistakable signs of wavering in their allegiance; and it was quickly discovered that intrigues were rife amongst those princes, with ultimate objects upon the slightest reverse of the British arms. It was therefore found necessary to employ a large British force of all arms to overawe the suspected Indian potentates, so that they might be kept from open revolt and from tampering with the fidelity of native troops in British pay, should the position of Russia upon the northwestern frontier become an accomplished fact. Signs of disaffection towards British rule manifested themselves in

force, brought from the three Presidencies, was assigned to Sir Frederick Roberts, a general who had previously successfully conducted operations in Afghanistan. The construction of the British railway system towards the north-western frontier of India had been shamefully neglected, as of no consequence whatever to the British Government; and a gross error had been committed by breaking the gauge of the line of railway from Sukkur and Sibi beyond the Indus to Quetta, by which the most serious inconvenience and delay were caused in the passage of the troops of all arms. The route to Candahar was by Sukkur on the Indus, by Sibi and Quetta, through the

Bolan and Kojak Passes. The distance between Sibi and Quetta was eighty-six miles, between Quetta and Candahar 145 miles. From Candahar to Herat the distance was 369 miles, making a total of 600 miles, along which the Anglo-Indian troops would have to operate, amidst tribes who had in previous campaigns been hostile and extremely dangerous. The farthest point to which the Sibi-Quetta railway had been constructed was 540 miles from Herat. The temporary terminus of the Russian Trans-Caspian system was rapidly brought by strenuous exertions to within 280 miles from Herat, with open

and through two difficult passes inhabited by wild mountain tribes. Secondary Russian bases of operations were at Khiva and Tashkent, with lines of operation for concentration at Killah on the Oxus, forty miles from Balkh, by Sarmacand and the course of the Oxus, for further operations across that river, through Balkh and the defiles of the Hindu Koosh to Cabul, in order to threaten the route to India by Cabul and the Khyber Pass. A further force of Anglo-Indian troops was therefore necessary for placing in position about Peshawur in observation of the Khyber Pass, and to operate, if necessary, against a



THE FIRST DESCENT INTO THE KOJAK PASS AND ASCENT BEYOND.

communications the whole way from the Caspian; and with inhabitants made friendly by good treatment, and who were thriving by prompt payment by Russia for every kind of provisions and assistance. The principal Russian base of operations was at Michaelovsk on the Caspian, with troops of all arms on their way from the Caucasus to this base, whose progress was clear and open the whole way to Herat. The distance was but 665 miles. The British base of operations, on the contrary, was at Kurrachee, on an inlet of the Indian Ocean, 1,020 miles from Herat, and through a line of railway of broken gauge from Sukkur and Sibi to Quetta,

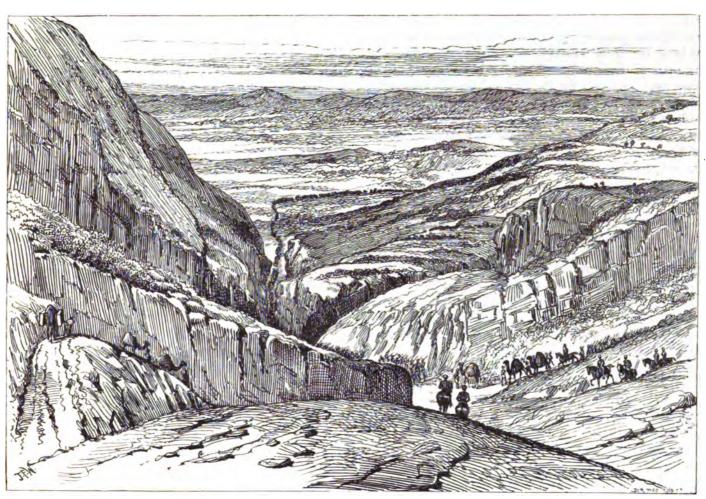
Russian force coming from the direction of Turkestan. It was only found possible to assemble at this point 15,000 Anglo-Indian soldiers of all arms for an advance through the Khyber Pass, as soon as it was clear that the Russian-Turkestan force was in actual movement towards Cabul. The formation of a force of only 50,000 men for the defence of the north-western frontiers of India was found to dangerously weaken the Anglo-Indian army in the three Presidencies. Orders were therefore given for the despatch of a considerable number of British troops from Great Britain, as it was considered dangerous to move a single

British soldier from any of the Mediterranean stations, owing to the serious situation of affairs in Egypt and the Red Sea.

The condition of Ireland was so disturbed that it was found impossible to remove from that part of the Empire a single regiment. It was also found, as in the case of the recent Egyptian campaign, that the undeveloped boys in the home battalions would have to be left in England, in case of any of these battalions being ordered on active service abroad; and that it would be necessary to replace these boys by calling out the 15,000 Reserve soldiers which had been left at home after enrolling those required for the Soudan

Reserves was insufficient to meet the wants of the country. As in the case of the Crimean war, nearly thirty years before, the untrained and long-neglected Militia formed the only Reserve of soldiers the nation possessed for the regular army. Even at the probable commencement of a serious war by Great Britain, the most recent and elaborated military system of the country at once collapsed.

With the political, the naval and the military situations thus apparent, Great Britain had to face a most serious campaign for the preservation of the north-western frontiers of her Indian Empire, and against the efforts of a powerful and encroaching neighbour to secure a strong position in



THE SECOND DESCENT INTO THE KOJAK PASS AND ASCENT BEYOND.

campaign and for the Mediterranean garrisons. Orders were therefore given for this action; but owing to the State having thrown these trained soldiers upon their own resources for employment time after time at the termination of military operations, and that at the end of their term of service they had been sent into the Reserve to meet with serious difficulties in obtaining a livelihood, only 11,000 men answered to the orders of the War Office. It was therefore perceived that Great Britain had at once exhausted the whole of the Reserve counted upon by the nation in time of serious necessity, and that the military system of

the Mediterranean. Under this unfortunate condition of affairs the British nation had to maintain her position in the Mediterranean Sea, and to commence a terrible struggle for the maintenance of her hold upon that rich and extensive country which had hitherto so vastly contributed to her commercial and material prosperity.

# GENERAL RESULTS.

Consequent upon the remonstrances of the British Cabinet with Russia against its occupation of Herat, and the receipt of news that the Russian outposts had been pushed

forward thirty miles beyond that fortress, immediate orders were given for the advance of the British force through the Bolan and Kojak Passes towards Candahar. After three weeks' toilsome and harassing march amongst the fierce mountain tribes of these passes, the Anglo-Indian force approached Candahar. The inhabitants of the city became highly excited. A large number of scoundrels within and around the city, ever on the look out for plunder, began to maltreat the bazaar-keepers, merchants, and householders, and commenced to rob their residences. The better class of Candahar inhabitants fled the place, and took refuge in surrounding villages. As the British commander neared the gates of the city he was met by deputations of the late inhabitants, who laid their grievances before him, and reproached the British Government as being the cause of their terrible misfortunes. These unhappy people informed Sir Frederick Roberts that it would have been far better for the city and for the tranquillity of the whole of Afghanistan if the British Government had retained its occupation of Candahar at the end of the late war, and had even advanced and taken possession of Herat for the purpose of maintaining law and order, instead of evacuating Candahar and the country, and then once more advancing to occupy the place, to the destruction of all their fortunes by robbery and violence. The British general informed the deputations that the British came as friends, and that order would be restored, if necessary, by force. The deputations informed the general in command that "the deeds of violence and robbery were already done —that they and the trade of the city were ruined." They once more pointed out the previous folly of the British Government in having evacuated Candahar, and in having refrained from taking possession of Herat. They again reproached the British for being the cause of all their ruin-foreshadowed the early capture of the city by the Russians, and its further plunder by the hordes of Turkoman horsemen who would sweep the country in every direction in search of plunder. The deputations then sorrowfully retired.

Candahar was occupied by the British during the first week of April without serious resistance. The blackguards who infested the city were cleared out with considerable trouble, in which several British officers and soldiers lost their lives. The fortress and the city were formed into a place of arms, with depôts of stores and munitions; and the troops, as they came from the Kojak Pass, were assigned cantonments in the immediate neighbourhood. Posts of defence were marked out, troops and guns were placed in assigned situations for resistance in case of attack, and the city generally rendered available as a position on which to retire in case of disaster to the British arms between it and Herat. A fortnight's time was occupied in hurriedly making the necessary arrangements for these objects, and to reorganise the British force for an advance. Strong British outposts were pushed

forward forty miles beyond the city. Ghiriskh on the Helmund was occupied with a small British force as an intrenched position, and as a point of observation from which the movements of the Russians in advance of Herat might be ascertained, and cavalry scouts were ordered to reconnoitre the roads for some distance beyond the Helmund.

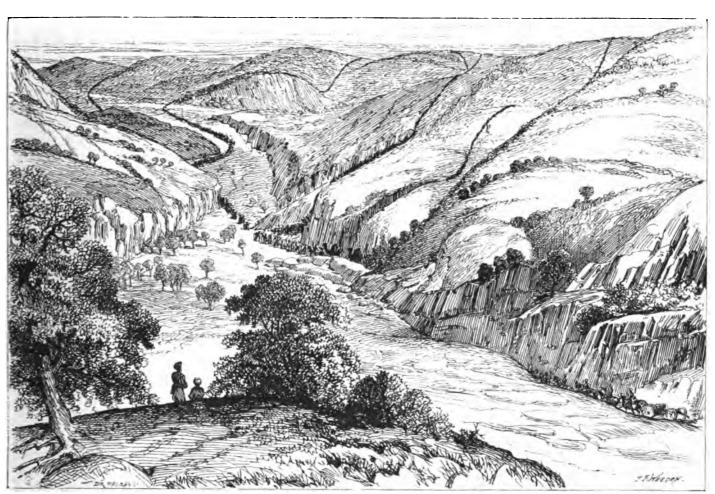
The moment the Russian commander, General Kouropatkin, heard of the British advance from Quetta, he telegraphed for reinforcements, advanced his outposts to Farrar, 140 miles beyond Herat, and supported them by 5,000 splendid Turkoman horsemen, admirably mounted, and commanded by Russian officers. The small force of Afghans which had occupied the fortress of Herat, now retired to a position of observation five miles beyond the city, completely overawed by the large force of Russians which continually poured into the place and overspread the country from Sarakhs. Russian reinforcements arrived in and around Herat from the Russian base at Michaelovsk on the Caspian unchecked and unretarded by a single Over 50,000 Russians, supported by 8,000 enemy. Turkoman horsemen, were echeloned between Farrar, Herat, and Sarakhs, amply provided with every necessary for war, and well fed from the neighbouring fertile districts, a week before the arrival of the Anglo-Indian force before Candahar. During the fortnight taken to consolidate the British occupation of that city, no less than 35,000 additional Russian troops were écheloned in support along the line from Sarakhs to the Caspian base at Michaelovsk. The whole of the Russian troops were provisioned without the slightest trouble, owing to the supplies of food procured from their own lately annexed districts, and from the neighbouring Persian frontier. The British force was maintained with great difficulty, owing to the fear of the country inhabitants surrounding Candahar of the results to themselves of a Russian advance when the Turkoman-Russian soldiers became aware that they had assisted the British force, and owing to the hostility and treachery of the people of the Zemidwar district.

A final remonstrance to the Russian Government from the British Cabinet, and a final request of withdrawal within the previously defined boundary of Afghanistan, having been again met with a firm refusal, and with a demand by Russia that the British troops should evacuate Candahar and surrender its occupation up to the Ameer until negotiations were completed for a re-adjustment of the boundary of Afghanistan—Herat and the district of Farrar to be included in the Russian line—the British Government directed the general commanding at Candahar to advance beyond the Helmund. The British force at once commenced its march in excellent order, with cavalry scouts fifteen miles in advance.

The British force crossed the Helmund on the 28th of April and marched towards Farrar. Beyond the repression of hostility in some of the villages in the line of march, no serious opposition was offered by the Afghan inhabitants

to the progress of the British troops. Through spies and other intelligence, the British general became aware that a Russian army of considerable dimensions was concentrated in a position of battle several miles in advance of Farrar, and that Russian and Turkoman horsemen were scouting the country thirty miles beyond that town and towards the Helmund. The British commander now advanced with extreme caution. He gave express orders to his advanced cavalry to avoid a collision with the Russians or the Turkoman troops, until his final instructions from the British Government decided his course of action with reference to the immediate commencement of hostilities.

towards the Russian position at Farrar, Russia declared war against Great Britain, her allies, and against all her dependencies. Russian troops of all arms were thereupon set in motion from every part of the Empire towards the Caspian, towards Bulgaria, Odessa and Sebastopol. A large Russian force was also concentrated around Kars, evidently with the object of invading Turkey from the Armenian frontier. Turkey, seriously alarmed for her safety, and absolutely without money, nevertheless with great difficulty endeavoured to meet the coming storm by a mobilisation of her troops, and by naval preparations. Austria commenced to concentrate large masses of troops



THE THIRD DESCENT INTO THE KOJAK PARS AND ASCENT BEYOND.

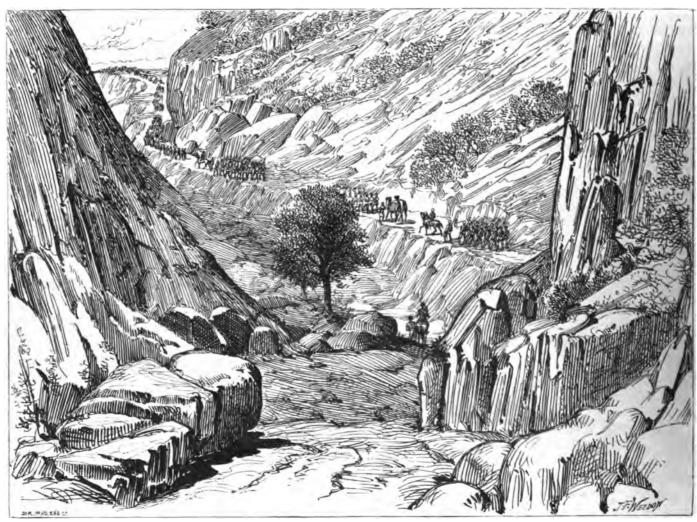
The British Government decided to direct the British commander in Afghanistan to continue his advance, and informed the Russian minister in London, for the information of his government, that they had given the order, and that the results of a resistance to the march of the Anglo-Indian troops to the previously defined boundary of Afghanistan beyond Herat would rest with Russia. The Russian Government at once telegraphed the recall of their ambassador, and threatened a declaration of war against Great Britain. Upon the receipt of intelligence that the British commander had actually recommenced his march

in Bosnia, there to await the course of events in Turkey. Germany made preparations for an extensive mobilisation, and actively prepared her fleets of war-ships for service where required.

The 10th of May, 1886, saw the British and Russian advancing horsemen within a few miles of each other, manœuvring cautiously, each acting as if anxious to avoid a collision, yet desirous of gaining information respecting the disposition and direction of march of their main body. The Anglo-Indian scouts were exploring the country over a wide front. A party of these rode towards a village

about twenty-five miles from Farrar, on the morning of the 12th, to find the place in occupation of a body of Russian and Turkoman horse. These rode out to meet the British, and opposed their further advance. The Turkoman horse at once opened fire, killing and wounding twelve British officers and men. The Turkoman fire was replied to, and the British cavalry charged. A short fight ended in a Russo-Turkoman retreat and pursuit of five miles, when the British met a force of Russian advanced troops in position, supported by a battery of light field-guns. The British cavalry at once retired slowly, and

well-protected ground; that he was in large numbers, with twenty guns of position, and forty light field-pieces for manœuvring; further, that his horsemen were extremely numerous, and covered the whole front of the Russian position. The British commander therefore determined upon a reconnoissance in force, by which to ascertain the exact position and disposition of the enemy to oppose his advance. The general himself accompanied the force, which consisted of 12,000 men of all arms. A cautious march of eight miles, during which large numbers of scouts were observed watching the march of the Anglo-



TROOPS EMERGING FROM THE NARROW PART OF THE DEFILE.

despatched information of the collision to the general in command. The British commander immediately reinforced his advanced guard, closed up the order of his march, and gave final orders for placing his force in line of battle, chose his position in case of attack, and halted there to obtain further information from his spies as to the dispositions of the enemy.

On the following morning the British general obtained information that the Russian army had chosen a position of battle, several miles in advance of Farrar, on high and

Indian troops, discovered the Russo-Turkoman force in position of battle, extending over three miles, and along a ridge covering the main road to Farrar, and commanding all the approaches by which the position could be either assailed in front or turned by flank movements. The Russian position was most skilfully chosen; its flanks were well-protected by natural obstacles and supported by large bodies of cavalry and artillery. The main body of Russian troops were in partial concealment amongst the hollows along the ridge. It was clear, from the number of artillery

posted in advantageous positions, and from the movements of numbers of staff officers from point to point about the Russian position, that a large army was before the British commander. An advance of a considerable force of Anglo-Indian cavalry drew the fire of the Russian artillery, and enormous clouds of skirmishers ran forward from amongst the enemy's slopes, and from the copses and woods which covered the upper part of their position. These skirmishers

the fact that he was in the presence of a superior force, which it was dangerous to attack without adequate reinforcements. His losses during the day's operations, were 120 killed and wounded, officers and men. He at once forwarded a request by telegraph for all reserves beyond Candahar to press on with the utmost rapidity, and despatched information to the Indian Government that his progress was barred by an overwhelming force, and that he



FORTRESS OF ALI MUSJID AND THE KHYBER PASS.

opened a hot fire upon the British infantry who were extended for the purpose of the reconnoissance, and upon the Anglo-Indian cavalry who were scouting the ground in advance. After a heavy skirmish of three hours' duration, during which the British general keenly reconnoitred the whole of the Russian position and its approaches, he retired his force, covered by his cavalry and two batteries of field artillery. He reached his own position of battle in the evening, after an exhausting reconnoissance which revealed

expected to be immediately attacked. He also requested that he might be reinforced with all possible speed. The general gave orders to the troops under his command to make the position as defensible as possible. Officers were despatched under escort to the posts along the line of communication with Candahar, with orders that these positions should be strengthened by every available means, in case the British force should have to retire upon them for support. By deductions for garrison in Candahar, and for posts along

the line of communication with that city, the Anglo-Indian force in line of battle consisted of only 28,000 men. The Anglo-Indian position extended over a broken line of rather more than two miles. Its right, a little refused, rested on a broad ravine commencing at the foot of the British position, and having at its base a narrow rocky water-course. This ravine ran steeply down from the Anglo-Indian right to the rocky water-course below, and rose gradually by broken ridges to a point about 600 yards distant. The apex of the farthest edge of the ravine was crowned by a knoll, whose width was about 200 yards. The opposite side of this knoll sloped to a heavy marsh-land of several miles in extent, over which it was impossible for attacking troops to move. The front of the knoll dropped towards a belt of woods distant about 1,600 or 1,700 yards. Beyond this belt of wood was undulating land, full of hollow ways and low-lying copses. The whole front of the British position was covered by broken ground, which formed natural obstacles for defence. These were strengthened by artificial means. The approaches to the left, the centre, and the right front, were commanded by thirty-four guns in admirable position. The left of the position trended gradually to a broad, shallow stream which had recently overflowed for a considerable distance on to some flat ground beyond it, thus rendering it extremely difficult for the enemy to turn this part of the position by a flank movement without danger of being enfiladed by the Anglo-Indian artillery while endeavouring to find a passage across the muddy tract of country beyond the stream. This stream ran towards and past Farrar, on the extreme right of the hills which faced the Anglo-Indian position. A rivulet, fordable in many places, branched from this stream, and wended its way along the foot of the Anglo-Indian position, and extended into the low marshy ground on the extreme right of the knoll beyond the ravine. Twelve field-pieces were placed upon this knoll for the protection of the extreme right of the Anglo-Indian position with a strong British infantry regiment in support. On the main position side of the ravine, eight guns were placed in position to sweep its bed, while its sides were lined by three regiments of infantry, with the wings of another in support. Infantry were extended in double line of skirmishers at the foot of the position, close to the stream, with supports and reserves. Outposts were pushed well beyond the stream. Vedettes and cavalry scouts were sent forward to the opposite hills. The whole of the remaining infantry were placed in position towards the top of the ridge, and with reserves under cover along the apex. The main body of the cavalry was disposed advantageously in positions 1,000 yards in the rear of the apex of the ridge, ready to sweep the flanks, centre or left; the baggage and impedimenta were massed under guard about two miles in rear of the whole position. The main road from Farrar to Candahar crossed the right centre of the Anglo-Indian position, bending towards the left rear, and again running in a direct

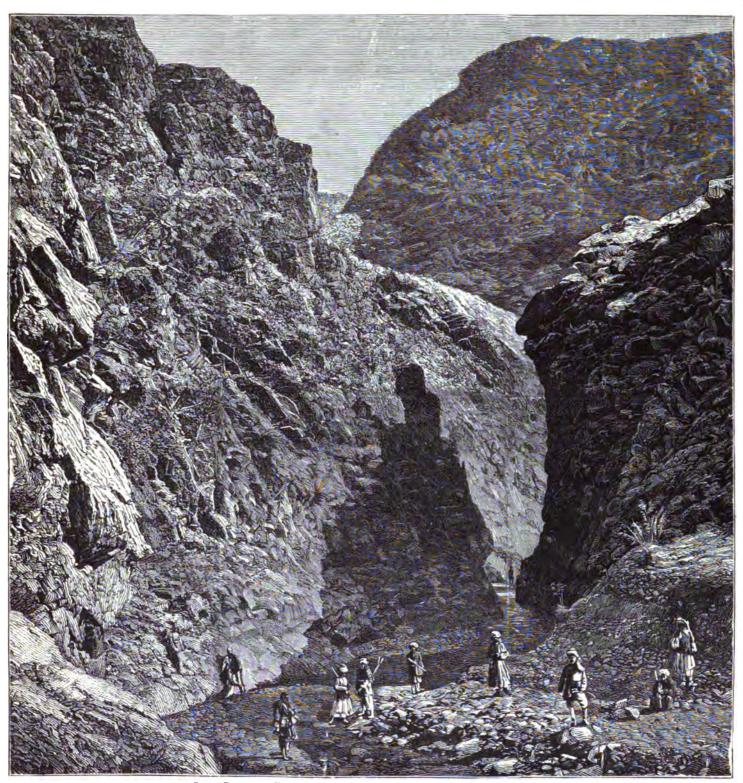
line to Kasimabad on to Dalarāma. The line of retreat was indicated as being along this road to Shorab and Ghiriskh. The right of the British position was regarded as the key of the whole, owing to the guns of the knoll being able to aid in sweeping the ravine, and to send their fire across the right front of the ridge. In order to facilitate the advance of supports from the other side of the ravine to the knoll, a wooden bridge was hastily constructed by the Royal Engineers. Above and below this bridge the ravine was strengthened with roughly-constructed breastworks of rock, behind which were posted the supports and reserves.

The morning following the completion of the British commander's dispositions broke clear and fine. Soon the outlying pickets in the belts of wood at the foot of the position, and the cavalry scouts beyond, perceived bodies of horsemen advancing slowly over the distant hills in front, in open formation, with infantry between the intervals. Spreading out, the cavalry galloped forward and commenced to scour the ground about their front. The British scouts, greatly outnumbered, fired and fell back upon the outposts. These extended, and commenced a rapid fire, and held their ground, but were forced back by the enormous superiority of the Russian lines of skirmishers. Three batteries of Russian guns now came down the slopes, unlimbered, and opened fire to protect the advance of ten battalions of Russian infantry, who deployed and lay down. Large bodies of the Russian staff rode over the opposite sides and commenced to reconnoitre the British position. The Russian staff spent about three hours in a careful examination of all the approaches to the Anglo-Indian position, and of its posts of defence; after which the Russian bugles were heard sounding the retire. The whole force of Russians then slowly drew off, and the Anglo-Indian outposts and vedettes once more advanced, to find the hills opposite strongly occupied by Russian cavalry and by infantry picquets. It being now certain that the Anglo-Indian position would be immediately assailed, the British general in command, together with his staff, spent the night in strengthening the position by every available means, and in making dispositions for a judicious use of his reserves along the whole front of his line of battle.

As day broke on the following morning, line after line of Russian skirmishers, advancing at a run, quickly sent back the Anglo-Indian vedettes and outposts upon the reserves. These again were rapidly driven across the stream which ran along the foot of the Anglo-Indian position. The battle opened with a rolling, biting fire of rifles. Battery after battery of Russian artillery came over the hills in front, and opened a tremendous fire of shot and shell. Regiment after regiment of cavalry trotted forward and took up their assigned positions. Battalion after battalion of Russian infantry in open order of attack, advanced swiftly and took cover amongst the

hollow ways of their own hill sides, until no less than 48,000 Russo-Turkoman soldiers were observed to be in position for attack, of which at least 10,000 were horsemen.

exclusive of orderlies, escorts, and baggage guards, with forty-six field and mountain pieces. After two futile efforts to turn the Anglo-Indian right, each effort being barred

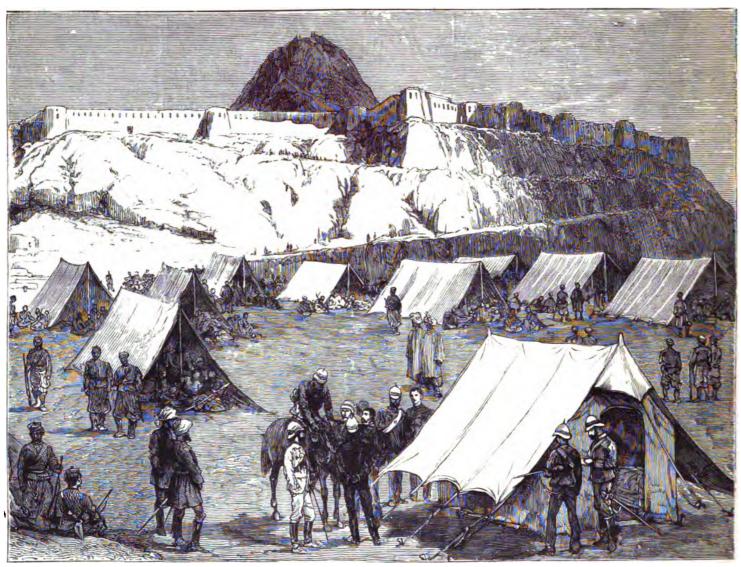


PARI DURRAH-ENTRANCE TO THE JUGDULLUK DEFILE, KHYBER PASS.

Seventy field and mountain pieces were soon perceived to be in position with which to support the assault. Opposed to these numbers were but 27,000 in line of battle,

by the extent of the marshy ground, the Russian general resolved to furiously assail this portion of the Anglo-Indian line, while he made a powerful demonstration against the left. Eighteen thousand Russian infantry, supported by twenty-five guns and 3,000 Russian cavalry, dashed forward against the knoll hill. After three hours' incessant fighting, during which this part of the Anglo-Indian position was continually reinforced, the Russian infantry succeeded in reaching its crest with an awful rush, drove back the remnants of the heroic defenders with a terrible slaughter, captured eight guns, and spread themselves over the whole face of the opposite sides of the ravine;

character took place at this part of the position; some Russian shells, pitching from the captured knoll amongst some native regiments in the right centre, caused them to waver, then to turn. Notwithstanding all the efforts of their officers, several other native regiments, now seeing the retirement of their comrades, commenced a rapid movement to the rear, thus leaving the British battalions to stem the torrent of the Russian advance. The wavering of native regiments soon afterwards became general all



THE FORT OF KHELAT-I-GHILZAI, NINETY-FIVE MILES FROM CANDAHAR.

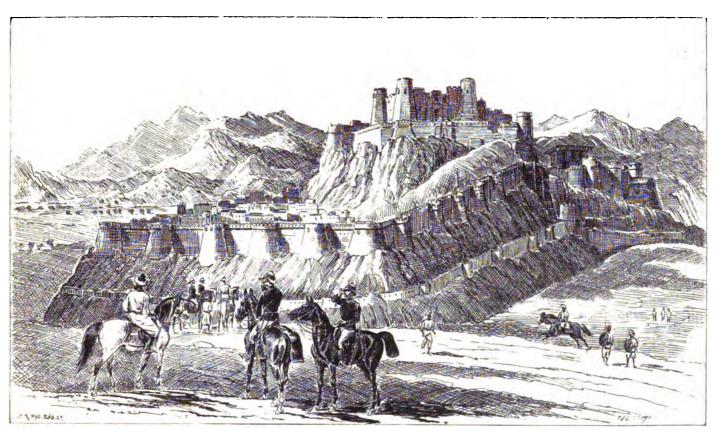
From a Sketch taken during the late Afghan War.

while two batteries of Russian artillery, with incredible exertions, were planted on the apex, and at once commenced to enfilade the right and right centre of the British line of battle. At this moment an enormous cloud of Russian skirmishers crossed the rivulet which wound around the foot of the left of the position, and with an awful fire of rifles forced back the troops opposed to their advance. Over two hours' fighting of the most terrible

along the line. These regiments, in the utmost dismay at the enfilading fire of the Russian troops on the knoll hill, were deaf to all the remonstrances of the heroic officers who endeavoured to once more get them into order. A crowd of fugitives soon began to stream along the road, spreading confusion and dismay amongst the baggage and camp attendants, who at once turned and fled, leaving their charge to its fate.

The day was lost; and nothing now remained to the British general but to cover a retreat by the British troops and some Sikh regiments who were endeavouring to stay the Russian progress. This was effected under a tremendous fire, at four miles from the late position, under the protection of a strong force of British cavalry, supported by three Sikh cavalry regiments and two British field batteries. A large number of native infantry-men now threw away their arms and fled towards the Helmund in the wildest disorder. The first few miles of retreat had scarcely been got over when a force, estimated to be 5,000 Russo-Turkoman horse, suddenly galloped past the flank of the rear guard, reached the remnants of the baggage, swooped

his retreat to the city, with the object of placing it in a condition of defence until reinforcements arrived with which to resume further operations. The scenes in and around Candahar were now those of murder, rapine, and wholesale robbery, committed by inhabitants of surrounding villages, and by scoundrels of every description within and without the place. Three days had scarcely passed amid these scenes by the remnants of the British general's force, when strong batteries of Russian artillery were observed climbing the hills surrounding Candahar. Twenty-four hours afterwards, enormous masses of Russian troops were observed to be taking up strong positions at different points about the city. These appeared to be receiving



FORTRESS OF GHUZNI, EIGHTY MILES FROM CABUL.

down upon it, cut down the guards, and commenced to plunder. A gallant charge of British cavalry failed to drive off the shouting enemy. A scene of the wildest disorder and confusion then ensued. Enormous masses of the Russian cavalry, supported by several batteries of artillery, now commenced a vigorous pursuit, which did not cease until the remnants of the Anglo-Indian force crossed the Helmund at Ghiriskh. The position here was not considered by the general in command to be entirely defensible against the vast masses of the enemy known to be now pushing forward towards Candahar. He therefore caused the small garrison at this point to be withdrawn, and resumed

constant accessions. A distant cannonade was soon commenced by the Russian batteries. The movements among the Russian troops then indicated a complete investment of the city and a threat to cut across the Anglo-Indian lines of communication with the Kojak and Bolan Passes. Some guns of heavy calibre were also observed to be in progress towards commanding points overlooking the city defences. A hastily-summoned council of war, after a due deliberation, decided against the absolute possibility of holding the city until large reinforcements reached the positions of defence, particularly as a large number of the fugitives of the native regiments who had first retreated from the field of battle

were still in a state of wild excitement and insubordination. It was considered that should the city be suddenly assaulted, the force could not be depended upon to make a firm show of resistance, and that a large number of the native troops would once more retreat and block up the lines of communication through the Kojak and Bolan Passes. It was therefore resolved at the council of war, to evacuate Candahar and fall back upon the troops holding the Kojak and Bolan Passes and upon the posts of defence taken up therein, until reinforcements arrived from India with which to resume the offensive. The decision of the council of war was confirmed by the arrival of spies, who stated that Abdhurran Khan, the Ameer, was rapidly advancing from Ghuzni with the whole of his force to throw himself under the protection of Russia, owing to his being completely astounded and overawed at the enormous masses of Russian troops now pouring along the country from Herat to Candahar, and at the sudden collapse of the British force in Afghanistan. In this decision he was also greatly influenced by a report that the Russian general in command in Turkestan, was advancing across the Oxus towards Cabul with a force of 40,000 troops of all arms.

The news of the disaster and defeat caused the whole of India to heave and throe as with some mighty convulsion; and it was seen to be as clear as daylight that by this one lost battle in Afghanistan, the British power in India had been shaken to its very foundations. The whole British nation was profoundly excited and alarmed. The Government was imperatively called upon by the nation to meet the situation by sending out sufficient troops to face the grave contingency, as it was found impossible to entirely rely on the firmness of the Indian native troops. It was also found impossible to send from England to India, even after the greatest efforts, more than 19,000 men of all arms, fit to undergo the fatigues of even one short campaign. The country perceived with the most intense dismay that the whole framework of its military organisation had utterly broken down. Instead of Great Britain being able to send out regiments complete in every detail, at their war strength, these regiments, as bodies of men under arms, could not be depended upon to meet the country's urgent necessities. The reinforcements of artillery required could not be horsed, owing to the faulty organisation of the system of horsing both artillery and cavalry. The commissariat and medical arrangements were entirely inadequate to meet the wants of the army. There was found at this crisis to be nothing but the most complete disorder and confusion throughout the whole organisation of the army. After the most strenuous exertions, by drawing upon the first- and second-class reserves and a portion of the Militia reserves, and upon the Mediterranean garrisons, 22,000 men were got ready for service in India. The whole of the available reserve having been enrolled for active service, the country had nothing but boys in the depôts of the regular regiments, and the Militia and the Volunteers left in the ranks of battalions at home for garrison duty. It was therefore resolved to embody 50,000 Militia, and encourage, as during the Crimean war, a bounty enlistment into the regular regiments from the Militia, and to grant officers commissions direct from that branch without examination. The quality of the men enlisting under a new bounty system from the Militia was, however, found to be of so low a character, that it was evident they could not be trusted to maintain the credit of British arms unless a considerable time was given for active training. The country now discovered that, notwithstanding the example of other European Powers in respect to military organisation, and the arrangements made by successive British Governments to imitate the arrangements of these Powers, the nation had not made one real step towards a safe military organisation that, as a whole, matters were now in a worse condition than that to which the country was exposed by the results of the Crimean war, over thirty years ago.

The indignation of the country now knew no bounds. It saw itself the victim of parliamentary inconsistency and supineness. The strongest denunciations of the political strife through which the interests of the country had been sacrificed, appeared in all the public Press. This was forced by the voice of public opinion to cast aside political parties and their unfortunate neglect of the naval and military affairs of the British nation, and to discuss the position of the country in an impartial and patriotic spirit.

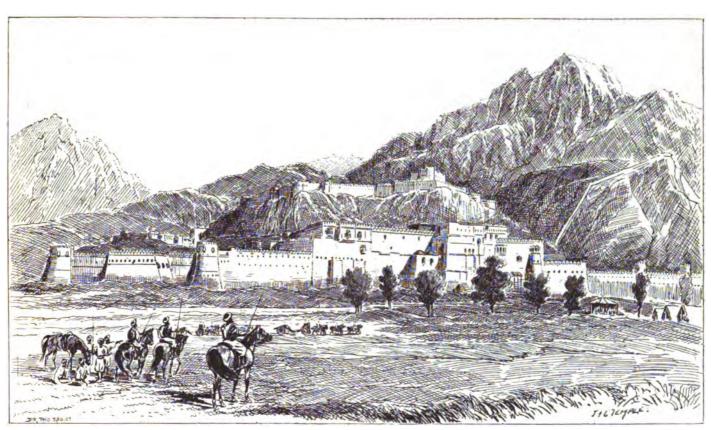
To add to the public alarm, the nation became aware that the Russian force concentrated near to Kars, as a base of operations against the Turkish Empire numbered 130,000 men, who were evidently about to operate towards Constantinople. The Sultan prepared for the defence of his territory, and again appealed to England for assistance in men and money. He was informed that no military help whatever could be rendered him, but that possibly a squadron of ships might be despatched to Turkish waters with orders to pass the Bosphorus, if necessary, to protect the city of Constantinople.

The Austrian Government now informed the Powers, Russia included, that, owing to certain movements of Russian troops towards the Danube and the Danubian frontiers, she thought it necessary to mobilise 200,000 additional men of all arms, while she pushed forward 100,000 into Bosnia and Herzegovina, and \*ccheloned\* 80,000 troops in observation of the course of military events in the neighbourhood of the Danube. Germany at once ordered her fleets to prepare for sea, despatched them with sealed orders, ordered a partial mobilisation of troops of all arms, and concentrated 400,000 men in the most important strategical positions of the Empire. France immediately despatched to sea the whole of her ships not yet cruising, with sealed orders, and mobilised 200,000 troops of all arms.

The 22,000 additional troops for India, got together with so much difficulty, were about to embark in the transports hired for their conveyance, vid the Suez Canal, when the French fleets from Brest and Toulon made their appearance at the entrance of the canal. The Emperor of Germany suddenly interfered to prevent further war and bloodshed, on the ground that it was useless for Great Britain to continue the contest in face of the terrible European combination against her. The Emperor pointed out to the British Government that its efforts would result in one great European, African, and Asian conflagration of war. He drew attention to the terribly excited state of Great Britain's Indian population, and informed her that her

be absorbed by these Powers under an arrangement by which each should secure such portions as might be conducive to their interests, and in furtherance of their own designs. These Powers quickly followed up this notification by the joint signature of a convention by which the Turkish Empire was partitioned.

Austria appropriated Bosnia, Servia, Montenegro, and the whole country to the west, up to the line of the Struma to the Gulf of Contessa, including Salonica, Germany took the complete protectorate of Roumania, Bulgaria, and Eastern Roumelia. Russia took the whole of Turkey in Asia, from the Armenian frontier to the Sea of Marmora, including the Bosphorus and Constantinople, to



BALA HISSAR AND PALACE OF THE SHAH, CABUL.

efforts should be directed towards the preservation of her Indian Empire and her colonies under a new condition of affairs. He urged upon Great Britain to consider her position in relation to Egypt and the Suez Canal, and drew the British Ministry's attention to the unsatisfactory result of their operations against the power of the Madhi, and positively stated his intention to prevent the British Ministry from further disturbing the peace of Europe and Asia, and by armed force if necessary.

This blow was final, and the power of England was seen by surrounding nations to be crushed beyond redemption. Russia, Austria, Germany, and France, clearly perceiving this, now intimated to the Sultan that his territory would the outlet of the Struma and along its left bank to the southern boundary of Eastern Roumelia. France was content with Syria, from the Iskanderoom Gulf to the Gulf of Askaba, thus placing herself as a standing menace on the flank of Egypt at Cairo and the Suez Canal, with possession of all the principal ports on the Levant. Italy also went in for a share of territory, but was informed that she had better extend her recent possessions on the Red Sea.

By one disastrous operation of war, in which were sacrificed the lives of over 16,000 Anglo-Indian troops, Great Britain was reduced to the position of less than a second-rate Power, with a powerful and rapacious neighbour in possession of a position from which she was able

to seriously interfere with England's route to India, to fight her for the possession of her positions in the Mediterranean, and to intercept her trade and intercourse with her colonial possessions.

In both Houses of Parliament, opposite political parties assailed each other with furious recriminations, while the British Press, forgetful of the manner in which it had taken sides while it neglected to point out the necessity for preserving the Empire from dangerous enemies, hurled forth the wildest denunciations against Statesmen who should have been securing the protection of the country from assailment, instead of fighting their party battles. All the nation's representatives in and out of Parliament, all the Press—while party strife ran high for place and power -had ignored the fact that every British institution was rotten at its very heart. All alike had regarded carelessly the giant tree whose roots appeared so firmly planted, and noted only that the leaves upon the branches seemed fair and green. These neglectful Englishmen had not cared to look for signs of canker-worms within the trunk, loathsome feeders on the sap, burrowers that ate away vitality.

It has been always—it appears to be a fundamental law in human progress—that a nation's power is weakened to a dangerous extent—its strength is sapped, when political party strife and personal intrigue for place and power usurp a patriotic preservation from the assaults of grasping neighbours.

Let the reader of history study as closely as he can the causes of the rise and fall of nations. He will always find their fall to be attributable to intrigues for power by men who have sought only for their own personal ends, to the sacrifice of the stern necessities of their country against the grasping covetousness of jealous Powers. These grasping neighbours have always struck a fatal blow the moment they have perceived those surest signs of weakness—the evidences of incompetency to self-protect, and the indications of impending dissolution shown by divided councils concerning preservation. An empire that has become great and powerful, and then fails to maintain in a manner adequate to her high necessities, the measures to secure the place in the universe she has gained by blood and treasure, must invariably become the prey of Powers who are jealous of her supremacy in the affairs of nations.

A. WARNING.

#### NOTE.

It may be urged by many that I have been either imprudent or have acted injudiciously in accepting and publishing the foregoing article. I have published the article because I think it may draw serious attention to the absolute necessity of active preparation for that which, in my opinion, will most assuredly come to pass without it, and to the necessity for this preparation being backed up by the very sternest determination to stand no further nonsense from that Power who has always made England's

emergency, her own opportunity to betray the trust that

has been put in her good faith.

The article was received by me nearly a month ago, too late for insertion in the March issue of this magazine. It will be seen that the author has written the paper upon the assumption that the primary difficulties connected with striking a definite frontier would be overcome, and that a boundary would be fixed, beyond which the Russian officers, with their usual perfidy, would advance as soon as the British commission was clear away, and Great Britain and Afghanistan lulled into false security by assurances that the boundary would be respected by Russia. But events have been precipitated by the recent movements of the Russian officers towards Herat, with the definite object of swiftly and surreptitiously securing it upon some false pretext. I sincerely hope that the recent movements of the Russian officers have defeated their object, and that Herat will now be secured safely under the protection of British troops. At all events, the rash advance of the Russian officers from the Merv and Sarakhs side of the Afghanistan frontier, has entirely altered the whole political and military situation. As the precipitancy of the Russian officers has clearly shown the object of Russia towards India, it is obvious that if we do not prepare to check this unscrupulous and bullying Power, now that we have time to do so, be it ever so little, we must be bereft of our very senses. If we do not prepare, seeing what has recently happened, we shall richly deserve the consequences. "We are not living in the days of standing armies, but of armed populations, and, until we recognise this fact, our condition cannot be other than precarious," has written an eminent professor of political economy.

I now form the opinion that it is doubtful if a great battle would be delivered in the position indicated by the author. It would be fought elsewhere, should Russia force this country to declare war upon her. I am in a position to say that Russia herself would be invaded in a part of her frontier that would quickly compel her to give other occupation to troops moving from the Caucasus to the Caspian towards Afghanistan, and make these troops hurry back rather faster than they moved towards India. This invasion would be supported by a large British fleet, and the force to execute the operation would leave these shores and other places I need not name, in a fortnight from the

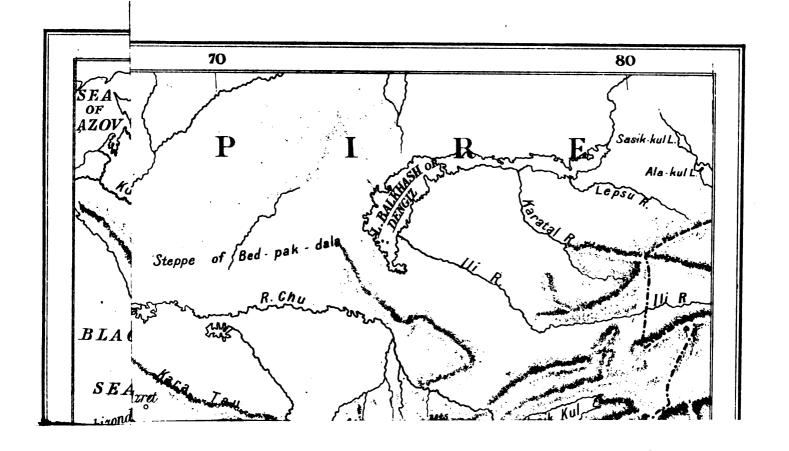
declaration of war, and fully equipped.

I do not entirely concur with the author in his estimate of this country's present or future military strength. When this country is put to its trial, it will, in my opinion, show the world that which will rather astonish it, especially as we have now become thoroughly aware of Russian intentions. "War tries the strength of every military framework," the great historian Sir William Napier has truly said. But when once the sons of Great Britain pull themselves together and settle down to fight, as they have done before, Russia will find that she has made a slight mistake.

The Indian Government is silently and I hope secretly preparing for a coming shock of battle. The native population are now loyal; whether they would remain so, if we sustained a severe defeat in any campaign against

Russia, it is impossible to say.

It may be argued that, as an editor, I ought not to offer any remarks whatever upon articles published by me, and that I should let them make their mark in proportion to their merits. The foregoing is, however, of so peculiar a character, and is on a subject of such vital





importance at this period, that I am induced to make a few observations upon its purport, particularly owing to the fact that I have, ever since I wrote my "Victoria Cross in Afghanistan" been deeply interested in every affair connected with that country. During the period in which I was engaged in writing my work, I saw some very important despatches relating to the events which preceded the unfortunate battle of Maiwand. It was as clear to me as daylight, that if we had marched to Herat soon after we occupied Candahar, we could have obtained possession of Herat with the greatest ease. Further, it became known to the Indian authorities, after the battle of Maiwand, that the Afghans in the Herat and contiguous districts were intensely surprised at our not occupying

Conservative party in power at that time for not ordering an advance beyond the Helmund, and an occupation of Herat. The Afghans, I repeat, admitted that it could then have been occupied without a blow. If the Conservative Government had given such an order, the terrible disaster of Maiwand would never have occurred, because Ayoub Khan would never have gathered force in Herat with which to advance from thence to Candahar. That the Conservatives did not give so wise a direction, was certainly attributable to the way the present Prime Minister, when in opposition, was everlastingly hounding down the operations in Afghanistan for his own particular political interests and for party purposes. In my opinion, if the Conservatives had ordered an advance beyond the



SHA SAID-GATE OF THE BALA HISSAR, CABUL.

the city and fort, as the place was at that time entirely at our mercy. Ayoub Khan was allowed to throw himself into the city. Brooding over wrongs in which he imagined the British had a hand, he commenced to gather around him a body of influential Afghans, who assisted him to form an army of nearly 30,000 men. Seeing our indisposition to advance beyond the Helmund, and our supineness in preparations to check any attempt to regain his lost position; further, perceiving that we did not even attempt to ascertain if there was a road from Candahar to Herat over which troops of all arms could travel, he decided to show us how little we knew beyond the Helmund. I have always greatly blamed the

Helmund soon after the British occupation of Candahar, and had boldly thrown a body of British troops into Herat, Mr. Gladstone would have immediately made a party question of the circumstance, and would have brought in a vote of censure on the Government as an endeavour to turn Lord Beaconsfield out of office on a question of annexation policy. Oh! the irony of political events! What a Nemesis has followed the unfortunate man who reversed the wise policy of his astute predecessor, in order to act consistently with his Midlothian campaign utterances!

The Conservatives saw the move the present Prime Minister would make, if they gave an order to advance beyond the Helmund. They hesitated; they failed to

sternly do their duty. Disastrous Maiwand was the result of their hesitation. But if Herat had been occupied, and the disaster of Maiwand saved by such a wise act of imperial policy, what then? One need scarcely ask, for the present Prime Minister withdrew from Candaharfrom that commanding position which our gallant general, the hero of many a terrible battle in Afghanistan, Sir Frederick Roberts, siad, and said emphatically in a most masterly report, that we should never loose our hold upon. He and his opinions were pushed aside to suit political party purposes. The present Prime Minister, by his Midlothian and other campaigns, succeeded in turning out of office a Statesman, the like of whom for real honest patriotism there had not lived since Viscount Palmerston. Mr. Gladstone reversed Lord Beaconsfield's policy in every direction. He "scuttled out" of Afghanistan to allow his quasi friends, the Russians, to "scuttle in," and land this country in a dangerous position. In what situation is this country now, through Mr. Gladstone's Midlothian utterances and his persevering reversal of the policy of the Statesman he was jealous of? It makes one's blood really boil with indignation when one sees one's country so terribly suffering through the effects of party strife for political place and power. My remarks apply equally to Conservatives, Whigs, and Radicals. All alike often sink the interests of the empire to indulge in party strife. The mind of the nation is led into excitement over this description of strife, and ceases to prepare for a heavy blow by neighbours only too eager to deliver this blow in the dark. Political party strife for place and power, and that alone, has led to the present dangerous condition of affairs, and I do not see what can save Great Britain from the results of a frightful and prolonged war, except the most ample preparations to meet it. Some of these preparations should be:-

1. Let returns be prepared of the whole of the army at present in Great Britain fit for active service and instant mobilisation. Let arrangements be made for mobilisation as swiftly as possible. Every brigade or divisional commander should be designated and ordered to hold himself in immediate readiness to assume his command. All the staff appointments should be notified, and adequate commissariat and transport arrangements should be quickly

perfected.

2. Two hundred thousand complete suits of kharkee clothing should be at once given out to make, together with a similar number of sets of accoutrements and equipment, proper proportions between infantry, cavalry, and

artillery.

3. The whole of the stores of war material at home and abroad should be at once examined, and their condition reported upon. They should be immediately filled to more than the usual store proportions to be maintained in case of sudden war.

4. Let the store proportion of rifles be increased to 500,000, and be constantly maintained at that figure, and the store proportion of rifle-stocks be fixed at 1,000,000 beyond the present number. Let there be ordered sufficient field-battery harness and appointments to bring up the store proportion to equip at least 400 additional guns. Let the siege equipment be at once looked to and largely

increased, by no means forgetting the equipment for mortar or vertical fire. Let the store of ammunition be in every way adequate.

5. Let immediate arrangements be made to suddenly embody 70,000 or even 80,000 Militia, and to send 40,000 of these to Ireland, to release from there the 31,000 regular troops—a portion of the remainder of the Militia to be put in preparation for service in the Mediterranean for the release of a corresponding number of regular troops from there in case they should be required for India.

6. Secretly let the whole of the colonies be communicated with, and quietly federated with the Empire for national preservation. The colonies will at once respond right

loyally.

7. Let the noise of thousands of workmen resound in our Dockyards and Royal Arsenal, as they bring forward many ironclad and other ships for commission, or prepare our war munitions for store and for issue to our army and our navy. Let our splendid mercantile marine be at once secretly communicated with, to ascertain the help the large shipping companies and owners will be prepared to render to the country. Then the nation will see a mercantile response the like of which this country has never witnessed at any period of its history.

8. Let the Volunteers be asked what they will do if war becomes a national necessity. Then 400,000 good men

and true will quickly answer to the call of duty.

9. Let an alliance, offensive and defensive, be made with our ancient ally, Turkey. Let us, if necessary, supply her with ample means to sustain her position and maintain her territory. The results of such a wise act of Imperial policy would quickly cause Russia to regret she again began to act the part of bully, the moment she perceived this country to be apparently in a position of difficulty.

In conclusion, let every possible preparation be made quietly, yet swiftly, and with a distinct intimation to Powers who may choose to make inquiries, that Great Britain is attending to her business, and that these inquirers had better attend to their own. In short, let these Powers see that the British nation in arms is not the nation to be put upon with impunity. We had one struggle with Russia thirty years ago. It did not result quite so satisfactorily to that empire as it anticipated when it deliberately brought on an outbreak of hostilities. Let that Power once more perceive that it is no joke to raise in arms a great and determined people—a people that do not know when they are beaten, whose every man has a bull-dog courage that, once aroused, is not satisfied until his enemy is defeated. I am no jingoist. We don't want to fight, but by heaven, if we do, we shall, notwithstanding the alarming statements made by Lieut.-General A. Warning, be able to show Russia or any other Power, that we shall have the men, we shall have the means, we shall have the money too.

Let us at present come to the conclusion that the British bull-dog has been sleeping too much latterly in fancied security, but that he has now become wide awake to danger, and is about to show his teeth in warning that he is aroused to the fact that enemies are prowling

around him.

EDITOR.

## EXPERIENCES OF A VOLUNTEER ADJUTANT.

BY RICHARD CLYNTON.

(Continued.)

me 15"

pro -15-



HEY say misfortunes never come alone. We had placed our line of sentries with their supports, and the colonel and other field-officers were going round to see that the men understood what they were about, while I rode back to

the reserve which was drawn up

across a pathway some 300 yards to the rear. While I was explaining to the men the nature and duties of outposts in general, a mechanic with his basket of tools over his back came along. Now the mechanic, when sober, is a very fine fellow, but occasionally he hides his many virtues under the shadow of the quart pot. This mechanic was drunk. No doubt he had drawn his weekly pay, and was staggering home to his wife and family with the balance left from the public-house. In a most insolent manner he cried out, "Attention, quick march!"

"I shall feel obliged," I said, "if you will go away and not interrupt us."

"All right, guv'nor, don't get your shirt out." With this he tried to go through the ranks, and I civilly requested him to go round the flanks.

"Not if I knows it! I ain't a-going round your flanks, as you call 'em, or your buttocks either. This is a public pathway and I am a-going through here."

"Don't let him through, men."

"Now who the blooming —— are you?" he said, as he staggered up and looked insolently into my face. "They must 'a' taken you down from 'Yde Park Corner I should think. I'm a British workman, I am."

"You're a very drunken specimen," I said.

"Am I?" was the reply. "That's my business and not yourn; you didn't pay for the liquor, did you? Therefore you just shut up, and mind your own business." He tried again to push his way through the ranks.

"Don't let him through!" I cried. "If you don't immediately go away I will fetch a policeman."

"All right, guv'nor, fetch a score; you'll be sure to find a lot playing pitch and toss, no doubt, behind the bushes."

"Are you going away?"

"Not unless you makes way for me."

"Don't let the drunken brute through," I said, as I rode away after a policeman, but where to find one I did not know. The day was now drawing to a close and objects were becoming indistinct, but hearing a noise in the rear I turned round in the saddle and had just light enough to see the mechanic stretched flat upon his back; how he got there

I never had the curiosity to ask. I felt considerable pleasure in this man's discomfiture, and a smile played upon my features, but it was of very brief duration, for I was so taken up with the pleasantness of my thoughts that I did not notice that my horse was taking me under a tree. I stooped, but it was too late; one of the branches caught the spike of my helmet and the chin-chain was jerked violently under my nose. The pain was simply excruciating. I thought my nose; which, goodness knows is not a big one, was torn off by the roots, and I saw more stars in the heavens than had ever been put there by our Creator. When I could speak I swore terribly, first in Hindostani, then in pure and unadulterated English. I sneaked back to the men with a sore nose and a spirit crushed.

To make matters worse it came on to drizzle, and we marched back to town through the slimy and slummy streets in the dim light of the gas lamps. Between the volunteer and the regular soldier I found two marked similarities: they both are for ever wanting to fall out, and they both seem to suffer from an insatiable thirst.

The distribution of prizes I always looked upon in the light of a farce. As a rule only those men come up who win prizes, and there is nearly a prize for every man who competes. It is the custom to get some military celebrity to preside on these occasions, and frequently a great deal of nonsense is talked. The "butter"—to make use of a slang expression—which is bestowed is of the very best quality, but the quantity detracts somewhat from its value. We never went lion hunting for our distributions, but used to content ourselves with our honorary colonel. He invariably delivered a long political speech about the encroachments of Russia in the east. He used to try these speeches upon the House of Lords, but that august body, not having the discipline of a volunteer regiment, never listened to him. To me these speeches had an interest, for they showed me that year by year the discipline of the corps was increasing. The first time I had the pleasure of listening to his lordship, to make use of a theatrical expression, the "goose" was in the house; but at the expiration of my five years the men sat as quiet as lambs all through the infliction. We did, on one occasion, try to introduce a change, but we found that every man with any pretensions to celebrity was engaged, in some cases two deep. One year we tried for Lord Wolseley-for he is always a success with the volunteers—but he was not available, so I suggested either Cetewayo or Farini, but the colonel thought it would be a dangerous experiment.

The tedium of my first winter in town was relieved by a most interesting though lengthy correspondence about the ten shillings I had given to the groom at Aldershot for looking after my horse while I was there. It will be remembered that I did not take a man from London, so as to save the Government the expense. I was very honest, and on the return sent in I put the item "Groom, ten shillings." The document was returned with a large blue pencil cross against the obnoxious item. I returned it

the female domestic who cleaned up my apartments. This was answered in the usual formal manner, "The Secretary of State for War is extremely sorry, but as no further money can be allowed under this head, the ten shillings must be credited to the public in your next pay list."

I wrote back and respectfully asked whether on future occasions I might be allowed to take my female domestic to Aldershot to act as my groom. Although my application was couched in the respectful language of red tapeism



A PAINFUL ACCIDENT.

again with an explanation; it was, in due course, sent back. This went on for about two months, during which time hope reigned supreme in my breast. The correspondence had now assumed gigantic proportions, and it went before the Secretary of State for War for his consideration. It was returned with the following remarks:—"It would appear that this officer is in receipt of one shilling a day in lieu of servant, therefore no further sum can be allowed." I answered respectfully that the sum enumerated went to

I received no answer; but I learnt a lesson. The next time I sent in a charge for horse allowance I lumped the groom in, and not a word was said. The War Office will swallow large pills; but the official throat sticks at small ones.

We always took part in the Easter Review, very much against the wish of the sergeant-major. "They do no good, sir," he would say, "only unsteadies the men. Three days at Aldershot would be far better."

"But the men seem to like it, sergeant-major."

"Some of them do, sir, but a good many don't, and those that go down look upon it as a kind of picnic. The local publican, sir, is the only one who benefits."

Acting upon this advice I persuaded the colonel not to take part in the Brighton Review, but to spend a pleasant and instructive day with another corps nearer home. We did, and I shall never forget it. It gives me the creeps even now when I think of it. We rendezvoused at the railway station at Richmond. It was a dull morning with a keen south-east wind blowing, and this told upon our muster considerably; but we started with something less than 400 men. We halted on the road below the Star and Garter, and each man had a basin of hot coffee and some bread and butter served out to him. This was done by the quartermaster's department of the other corps which we joined here. We then marched across Richmond Park towards Wimbledon Common, and now the real pleasure of the day commenced, for a thick sleet began to fall, and the wind blew through us, and those on horseback had considerably the worse of it. We trudged on, nothing daunted. had our sham fight, and then turned our faces homewards, marching over Putney Bridge. The holiday-makers were pretty well all inside the public-houses. Some few lounged about outside and chaffed us as we passed. The battalion was dismissed in Onslow Square, drenched to the skin, and the mounted officers nearly frozen to death. The next year we tried Brighton, and we had a most lovely day. I slept on a sofa in the orderly room, and paraded at three o'clock in the morning, and did not get home till between twelve and one o'clock, black with dust, tired to death, hungry and thirsty. The men behaved extremely well, never murmuring, and bearing cheerfully their privations. In reviewing the day I could not but admit that the sergeant-major was right. The volunteers could learn but little. The one or two manœuvres they had to go through on the Downs were marred, if not entirely spoilt, by the crowd. But it was a pleasant outing, and no doubt it was very good practice for those Guardsmen who seem to be ever ready either to command a brigade, do brigade-major, or act as galloper; but, as I have already said, to the volunteers themselves the day is not instructive. There is too little time to correct errors, and there is absolutely no "fire discipline," the great object being apparently to get rid of the ammunition as fast as possible, or to get ready for the inevitable march past.

My last Easter Monday was spent on the flat country that lies below Fort Southwick. The troops assembled, and the general idea was explained to commanding officers. The signal gun was fired, and away we started, my battalion being the second to move off in the brigade, the leading battalion having orders to incline to the right so as to clear our front. I shall not forget our advance in a hurry. Our colonel was eager for the fray, and evidently thought that he was commanding woodcocks and not men. He had been told that the centre of the position to be

gained was a farmhouse that lay on the slope of the Downs some way on the Farnham side of Fort Southwick. What other orders he received on the subject I do not know, but he led us in open column over a country inclosed by wire fencing, and cut up by deep plough furrows which an unusually dry spring had made as hard as rocks. The men soon lost all formation, and the advance became a scramble. The mounted officers had to ride for gates, and were with their men only every now and again. The colonel had the leading company and was taking them on at a terrible pace, not caring two straws where the rear of his battalion was. They, poor fellows, were stumbling over the ploughed fields, or tumbling over the wire fences. I saw one man nearly strangled. He thought it easier to get through the wire than over, but his comrades on either side were of a contrary opinion, and just as he had got his head through, some half-dozen fellows on either side stood on the wire above, and the fellow might have been seriously injured if his cries had not brought him assistance. Another man either broke or sprained his ankle, and he was borne away in triumph upon a stretcher by the ambulance party, who looked upon this accident in the light of a godsend.

We now came to some grass land, and we were able to get the men together a bit, but the mounted officers were thrown into a state of temporary panic by a small ditch about a foot wide. A horse is a very good judge of the capabilities of its rider. There was indecision and a want of pluck in the saddles, and the horses knew it, and shied, stood up, and, in fact, did everything but go over the ditch which they could easily have taken at the walk. One field officer ignominiously dismounted, and his horse was led over for him. I went back and gave another a lead. His horse took the bit between its teeth, and jumped as if he had a yawning chasm before him. The effect upon the rider was marvellous; he was thrown up in the air until the soles of his boots were nearly level with the saddle, and he came down heavily upon the pommel, and I could see by the expression on his face that he did not enjoy himself.

One of our majors was invariably taken ill before the Easter Field-day—some periodical disease used to catch hold of him. At first he used to look forward to the day, but as the time drew near his symptoms began to appear. "I feel deuced seedy—got a chill, I expect; so provoking too just as the Field-day is coming on. But if I can only crawl out of bed, you may be sure I shall be there." He seldom was. He was by no means a bad rider, but his nerves were shaken. The beginning of this disease I remember well. It so happened that on one occasion we rendezvoused on our rifle-range to combine two things—class firing, and instruction in the attack formation. The latter commenced, and we had gone through all the stages until we came to the final charge. The drums beat, the bugles sounded, and the men yelled and broke into the

double. The noise ceased, and the command to "halt" was given, and a riderless horse trotted up into the supernumerary rank. The sergeant-major with his bland smile said, "The major is thrown, sir!"

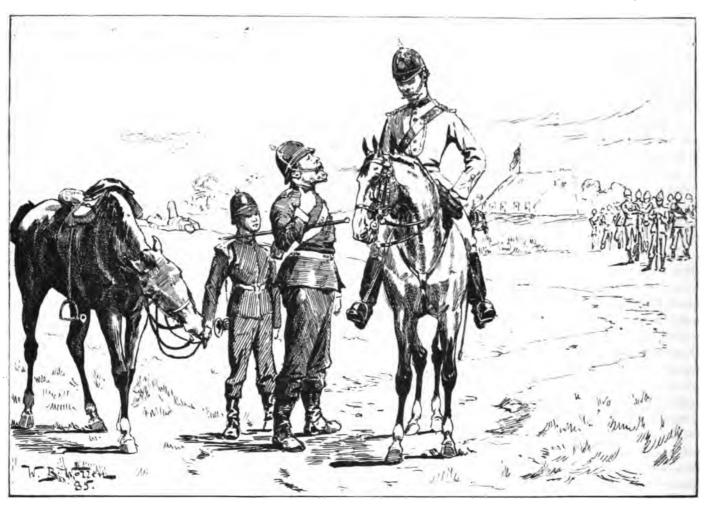
I turned round and saw the officer in question lying upon his back like a turned turtle. "I hope he is not hurt, sergeant-major?"

"No, sir, I expect not; the ground is soft."

The sergeant-major was right; no damage was done beyond a shaking of the nervous system. "Here, bugler, take this horse back to Major——"

"He won't get up again, sir," the sergeant-major said.

aimed at, namely, the farmhouse, was already in the hands of the enemy, but we advanced to where a road intersected the lines of operations. Here we were halted, and an infuriated staff officer galloped up, swore we were all killed, and sent us back out of action. I do not know by whose order it was, but we came into action again, and began to blaze away at the London Scottish, whose bare white legs stood out in strong contrast against the green fields on the opposite side of the road. The rattle of musketry was now deafening, the smoke blinding, and the excitement as great as if it had been real warfare. Every now and then a big gun on the hill above belched forth a



"THE MAJOR IS THROWN, SIR."

"A ten miles' walk in long boots, sergeant-major, is no joke."

"He can get a train about a mile from this, sir."

To the delight of the bugler, he had to ride the major's horse home.

But to return to the scene of action on the slopes of the Portsdown Hills. The colonel with the leading company came into action at a range of something under two thousand yards, and eventually the rest of the battalion came up, and was extended and advanced over a very large field of new-sown corn. We could see that the object

volume of smoke. Officers shouted, and many swore; but our sergeant-major still wore his bland, placid face. Had anything been in the rifles the slaughter would have been immense, and the bloody battle of Albuera would have been nothing to it. One colonel of volunteers I saw bring up his battalion to within a couple of hundred yards of the enemy in quarter column. The engagement ended by a want of ammunition on both sides.

"Who do you think has won, sir?" one of my officers

"The Lord only knows," was my reply.

We now loitered about waiting for the march past, and the brigade water-cart came within tantalising proximity to the poor fellows, who were dying with thirst, but as it was impossible for them all to get a drink, we allowed no man to fall out. Other corps not so well in hand broke out of the ranks and mobbed the cart; this so enraged a huge captain of my own corps, who stood six feet, and was stout in proportion, that drawing his sword he placed his back against the cart, and defended it as Horatius Cocles did the bridge in the good days of old.

The crowd on the Portsmouth Downs was not nearly as great as at Brighton. At the latter place the people mix freely with the combatants and stand a few yards in front of the line of fire. When the volunteers were armed with muzzle-loaders such a position was not at all times free from danger, for occasionally a careless man would forget to extract his ramrod, and such a thing with a charge of powder behind it is searching, to say the least.

On all occasions the conduct of the men was exemplary in the extreme—no drunkenness and no insubordination. Of course the discipline in some corps is far more strict than in others. The excitement on these Easter Fielddays is shared equally by officers and men, and when they err, it is generally by too much zeal.

On one occasion I remember seeing a volunteer in a correct kneeling position about thirty yards behind the line of skirmishers taking deliberate aim at the enemy, to the very great peril of his comrades in front; an excited officer rushed at him, and catching him a good whack with the flat of his sword over a not to-be-mentioned portion of his body exclaimed, "Get up, damn it! don't you see you're lagging behind!"

Our second inspection took place in the Wellington Barracks, for our own square was not large enough, as we had grown in strength, and multiplied. We had a new inspecting officer, and I was in hopes that everything would have gone off well, though I knew from experience that new military brooms, though they may sweep clean, never praise. How many times have I been in my military career to fresh quarters, and when we have been inspected for the first time, been found fault with, and not even damned by faint praise, though frequently damned considerably without it; to be praised when we left the command for our "marked" improvement in all things, only however to be damned again when we marched into fresh quarters.

On the present occasion I must confess to being very hopeful. Everything had gone well up to the time of our marching off from our private parade. The men had come up well, were properly dressed, and looked very smart. But to our horror when we got to the Wellington Barracks, we found another very strong corps already there, and although they were drawn up in the narrow part of the square, yet the flank companies of their line trespassed upon our ground.

My temper was ruffled to a considerable degree, and I wished the other corps with its monkey-skin busbies buried in the pit of Tophet, or in the primeval forests from whence those monkey-skins came. To make matters worse, just as our senior major was called out to put the battalion through the manual and firing exercises, the other corps commenced their gun drill just in our rear. Words of command were never heard or were misunderstood, and while some men were at the port, others were at the support, while a few to vary the scene came to the slope. The sergeant-major smiled as usual, and I swore. It was wrong, I know; but had I not done so, I feel sure that I should have burst—a string of oaths acted upon me as a safety valve.

After this the regiment never properly recovered itself, and everything seemed to go wrong. The officers when called out had lost all confidence in themselves, and were flurried. It is related of a certain general now dead, that on one occasion when greatly enraged at a particular regiment in his brigade, he exclaimed, "Send all the pioneers of the brigade here and let them dig a pit as deep as hell, and then march that damned regiment into it."

My feelings towards this corps with their monkey-skin bushies was exactly the same.

During my five years as adjutant there was a large muster of volunteers in Hyde Park. My regiment paraded in force, and was marched there in all the pomp of war without any of its danger; though, indeed, on such occasions mounted officers ran some risk, for every horse which had only seen a soldier in the streets was guaranteed to be a trained charger. The consequence was frequent calamity, while the display of horsemanship was frequently ludicrous.

Our route was up Oxford Street, and we had to enter the park by the Marble Arch gate. The air literally rang with the sound of martial strains, and as we marched along there were frequent blocks, and the pavements on either side of the streets as we neared the Park were crammed with people. The British rough, when not excited either by anger or drink, is a good-natured fellow. He has the reputation of being good-tempered also; he may be. I am sure the man subjected to his chaff must be, and the volunteer mounted officer always falls in for a fair share One place just beyond the Circus, we were so jammed that I could not help backing my horse into the crowd, whereupon a most respectably-dressed woman exclaimed "Now then, Baker, where are you shoving your horse's tail to?" This remark was much enjoyed by the crowd. One playful rough caught hold of my foot, and dug my spur into the horse's flank, which made the poor brute plunge, and there were screams from the woman, and cries of "Whoa, Emma!" from the men. One fellow requested me not to ride people down, while another touched his cap with mock politeness, and begged me to get inside my "omnibus," as he called my horse, saying at the same

that there was "no extra charge." But it was at the Marble Arch that we had the greatest crush, for here carriages attempting to get into the Park added to the confusion. We also had to make a temporary halt to let another regiment coming from an opposite direction pass in. My horse became restive, and would not stand still, and it took it into its perverse head to back until it actually sat down in a lady's victoria, the fair occupant of which screamed with fright, while her coachman swore with rage. Such language I never heard before, and that of the Coper on Clapham Common, which was still fresh in my memory, paled before it. I felt sure this fellow must have been on the job, for no private servant would have dared, in the presence of his mistress, to make use of such abuse. To add to my discomfiture I slid off the

horse's back into the lady's lapamidst the yells of the crowd.

I apologised to the lady profusely, but all she did was to cry, "Get away! Get away!"

This was easier said than done.

A voice from the crowd cried out, "Prick 'im with a pin, marm! prick 'im with a pin; stick it in the soft—that'll move 'im."

Another cried out.

"Oh! 'e ain't a
going to get up in a

'urry, 'e ain't; nor 'is 'orse neither."



THE EFFECT OF TAKING A STEADY AIM.

"Jehosaphat," exclaimed another, "don't 'e look comfortable neither!"

The horse indeed seemed perfectly content to sit where he was.

At length there was a move forward and I was able to extricate myself from a disagreeable position, though one of my spurs caught in one of the flounces of the lady's dress and tore it to rags. While I disengaged my spur I apologised, but the lady seemed dumb with terror. Her coachman was certainly not afflicted in this way; he still larded his conversation with oaths, and exclaimed, "Get hup, you hugly brute." I believe this remark was addressed to my horse and not to me. At any rate it was accompanied by a cut of the whip, directed certainly at the animal. I mounted and rode after the regiment amidst the jeers of the crowd. At the gate leading to the Park I was joined by Simpkin, the adjutant of another corps.

Simpkin, whom I knew very well, had what by some is

called a fine presence, and by others a large stomach. As he rode by my side, a man who, I imagine was a coster-monger, said to his friend, "My eyes, 'Arry, there's a roe for you!" He evidently looked upon my friend in the light of a bloater.

Simpkin hated the sight of a horse, and always looked with dread upon the big Field-days. And either he was a bad rider, or he was peculiarly unfortunate in his mounts.

"What sort of a horse have you to-day?" I asked, knowing his peculiarity.

"A regular man-eater," was the reply. "I have been fighting with him for about ten minutes; that is why I am behind the regiment. Don't you hate these cursed big days?"

"Oh! I don't mind them, but I hate the crowd."

"I say; what have you been up to? You've got a woman's garter on your spur."

"No," I said as I looked down, "it isn't a garter; it's a bit of a lady's flounce, though." I then related my misadventure, which my friend heartily. laughed As Rochefoucault says, "In the distress of our best friends we always find something that does not displease us."

"You ought not

to have much difficulty in sticking on," I said, "with those holsters," alluding to a large pair on his saddle.

"My father carried these in front of him through Waterloo."

"The devil he did! The moth seems to have got into the bear-skin."

"Not a bit of it; I've torn nearly all the hair out of them by holding on like grim death to a dying nigger."

"Your support in that direction is pretty well gone," I said.

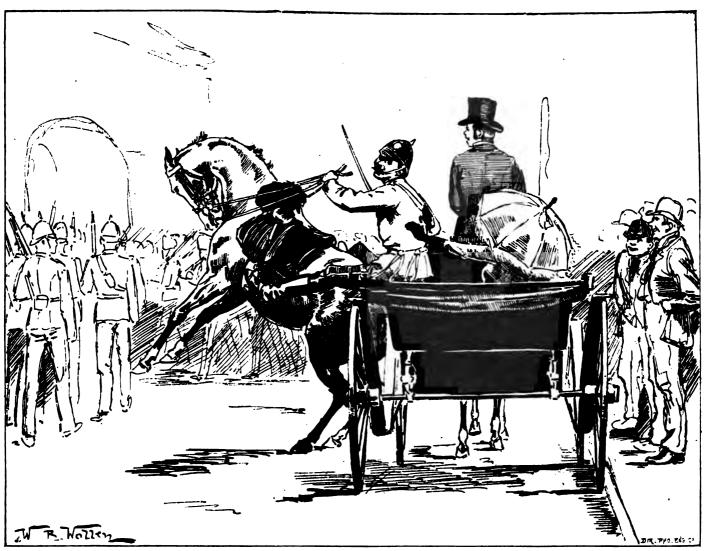
"The worse luck," was Simpkin's reply; "but I've plenty of support here," he said, as he slapped the leather pouch. "If you want a drink, old fellow, and if I am not carried off the field a bruised and mangled corpse, you know where to find it."

I did not see my friend again until I saw him being half supported, half carried between two policemen to a clump of trees not far from the guard-house in the park.

Fortunately no bones were broken, but he was terribly

shaken. Directly I could get away I rode over to see how my friend was getting on. He was minus his sword—that he had flung away "to lighten ship," as he called it. His tunic and trousers were torn; his face was pale and his head was bare.

- "Where's your helmet?" I asked.
- "Heaven only knows!" was the reply. To my inquiries as to whether he was much hurt he said—
- "Where is he?"
- "Gone back to the infernal regions, I hope. The worst of it is the damned brute has got my flask."
- "There is a move—I must be off. Good-bye, old fellow, I am glad you're not hurt."
- "I say Clynton, you haven't a drop of anything in your holster, have you?"
  - "No, I never carry a pistol."



A VERY AWKWARD POSITION.

"I don't think any bones are broken. The brute took fright at the 'present,' scattered the band of the corps next to us, and bolted clean away towards the magazine. I tried to make for a heap of manure, intending to throw myself on to it; but the damned brute shied and threw me into a heap of hard stuff. I thought my end was come. I believe it's the devil incased in a horse-hide that I've been riding."

- "That's a pity. I'd give a trifle for a nip, even if it were raw. I always carry some, for one never knows what is going to happen."
- "Nor where your flask may be carried to," I replied, but poor Simpkin did not smile at this joke.

'The show over, the crowd dispersed, and we got home without further adventures.

## OUR NAVY ON AN OUTBREAK OF WAR.

has



been said, comparatively, as to the organisation and d istribution of our fleets. as at present constituted, on an outbreak of war with a strong maritime nation or combination of nations,

while a great deal has been written about the present condition of our Navy.

It may not therefore be out of place to speculate on this subject, considering that the condition of the political atmosphere is such that no one can tell how soon the horrors of a European war may overtake us.

Let us first consider what will be our requirements should such an eventuality arise:

1st. A large number of swift, armed cruisers to protect and maintain our food supply, the value of which per annum is roughly the enormous sum of £120,000,000!

2nd. A fleet to guard our own shores and to keep command of the English Channel.

3rd. A fleet in the Mediterranean to guard the Suez Canal, and generally to protect our Eastern trade and communications with India.

4th. A squadron at each of our many colonies strong enough to protect them, and to vanquish the ships of our enemies which may menace those colonies.

5th. A large number of merchant steamers, some fitted as transports, some as torpedo depôt ships, some as floating hospitals, some as colliers, and some for general stores of ordnauce and provisions.

6th. At each of the principal seaport towns, both in Great Britain and in the colonies, proper barracks, or depôt ships, for receiving and accommodating officers and men of the Royal Naval Reserve and any volunteers who may come forward—each of these depôts having an efficient staff of officers and instructors to mould the recruits into discipline and the general and varied requirements of the service.

Our first requirement must be met by the employment of frigates, corvettes, sloops, and of many armed merchantmen, armed with the new quick-firing six-pounder guns, or as at present organised, armed with the old truck guns which are stored at various colonial seaports.

These vessels ought to be ready to issue from all our seaports throughout the whole world not later than a week after the declaration of war, and should be at once able to seek out and sweep from the seas all the armed cruisers of the enemy.

This could only be done by keeping in peace time a certain number (say two or three) of corvettes or sloops—out of commission, but in every respect ready for the pennant at a moment's notice—at each of the principal colonial seaports, and by hiring, on an outbreak of hostilities, such merchant steamers as may be available at those ports and placing in them those guns and other fittings that have been designed for that purpose, and which are already stored at the various naval depôts abroad.

These vessels would have to be manned by the officers and men of the Royal Naval Reserve who happened to be on the spot, together with the officers and men of the Colonial and Naval Forces and such other volunteers as might be obtainable. The commander-in-chief would send such of his officers as he could spare to command these vessels, giving them "acting" rank pro tem., and say, ten, fifteen, or twenty men, according to the size of the ship selected, as being of good character and ability, to accompany the acting commander as petty officers and instructors to the semi-disciplined crew he would have to command; filling up the vacancies thus made in the crews of his own vessels by officers and men of the Royal Naval Reserve.

Such commands as could not, owing to scarcity of officers, be filled by officers of the Royal Navy, would devolve on lieutenants of the Royal Naval Reserve commanding merchant steamers, and by any pensioned naval officers who may have emigrated and wish to serve their country in an emergency.

During peace time, the officers and men of the Colonial forces and such men of the Royal Navy Reserve as happened to be at the ports, might be able to go on board these corvettes and sloops which are out of commission, say once a week, and learn the drills and details of the guns which on an outbreak of hostilities they would be called upon to work. If this idea were carried out, it would greatly increase the efficiency of the ship on being commissioned, and the country might reasonably count on getting men who know how to handle the machines

put into their hands. Moreover, when a sailing ship arrives in port, her crew is often discharged and the men loaf about doing nothing till they get another ship: it is therefore not improbable that if suitable depôts were established for receipt of these men, they would be only too glad to do a month's drill out in the colonies before shipping again.

This is probably all that could be done in our colonial empire. It would be efficient, and, if thoroughly organised in peace time, would not be difficult to perform when war overtook us.

Our next five requirements must be met by home organisation. The Channel and Mediterranean fleets should be largely reinforced, cruisers should be despatched in all directions, gun-vessels and coast-defence vessels manned and distributed around our shores, and many large depôts should be formed with an efficient staff of instructors.

Let us see what ironclads, &c., we now have out of commission and more or less ready this year. We have sixteen sea-going ironclads, three armoured cruisers, five coast-defence ironclads, thirty corvettes and frigates, thirty

#### MEDITERRANEAN FLEET.

1st Division.  Alexandria.* Superb.* Teméraire.* Inflexible. Thunderer. Ajax.  2nd Division. Rodney (flag). Dreadnought.* Orion. Monarch.* Intlumentation. Apart. Apart.  Production. Rodney (flag). Dreadnought.* Apart. Hotspur.	SRD DIVISION.  Northumberland (flag).  Warspite (detached).  Valiant.  Black Prince. 6 merchant torpedo depôt ships. 6 corvettes and despatch vessels. 2 hospital ships. 6 colliers. 4 store ships.
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#### HOME OR COASTGUARD FLEET.

Cyclops. Hydra. Hecate.	Gorgon.	Hector.	Defence. *
Hydra.	Glatton.	Shannon.	Resistance.
Hecate.	Penelope.	Repulse.	Minotaur. *
	Lord 7	Warden.	

These latter thirteen vessels would be distributed around our coasts, each one being the senior officer to a flotilla of gun-boats and torpedo boats. The whole flotillas would form a "cordon" around our shores. Each vessel would have, say, an eight mile beat, so that, by keeping up communication with each other, they might be able to cooperate, and so hold in check a descent on any point of our coast line, until the arrival of reinforcements.



FIRST-CLASS TORPEDO BOAT. EIGHTY FEET LONG; SPEED NINETEEN KNOTS.

sloops, and about sixty gun-boats of all sorts and sizes, some for sea work and others for coast defence.

We actually have all these ships, but not more than half the number are absolutely ready for commission. The remainder, with the assistance of our private firms, and with increased activity in our own dockyards, might be got ready sufficiently to render valuable service in a fortnight or three weeks.

We will now consider what will be the probable composition of our two principal ironclad fleets, viz., those of the Channel and Mediterranean.

#### CHANNEL FLEET.

1st Division. Edinburgh (flag). Colossus. Collingwood. Conqueror. Rupert. Neptune.

2ND DIVISION. Hercules (flag). Bellisle. 4 Devastation. Sultan. Bellerophon. Iron Duke.

3RD DIVISION. Agincourt (flag). \* Achilles. 4 Impérieuse. Warrior.

6 corvettes and despatch vessels. 6 merchant steamers carrying tornedo boats and light guns, very fast. 2 hospital ships. 6 colliers.

steamers with stores and war materiel.

The remainder of our frigates, corvettes, sloops, &c., after providing for the requirements of our principal fleets, would be divided equally and despatched to cruise independently on our various trade routes.

The first two divisions of the principal fleets would form the fighting line, whilst the third division would generally hold itself aloof from the action as a "Reserve," until it can see an opportunity for despatching its torpedo boat flotilla under cover of the smoke to destroy the enemy; its function being mainly to protect the commissariat and to reinforce the other divisions at a critical moment. though of course in bombarding operations the third division would be actively engaged.

The idea of attaching so many colliers and store ships to the fleets arises from the notion that in future wars, an efficient commissariat will be as necessary to a fleet as to an army on a campaign. The ships ought to be able to coal and complete with stores at sea, so as to render them independent of going into port, otherwise a golden opportunity may be lost and disaster courted; for we can readily imagine the effect of a hostile fleet just bearing in

\* Ships now in commission.

sight when we only had sufficient coal to reach the nearest coaling station at moderate speed, and with supplies not sufficient to bear the expenditure of six or eight hours at full speed. Of course an action would have to be fought, but what after? Without coal a disaster would be inevitable. Now as to manning the ships which would have to be commissioned.

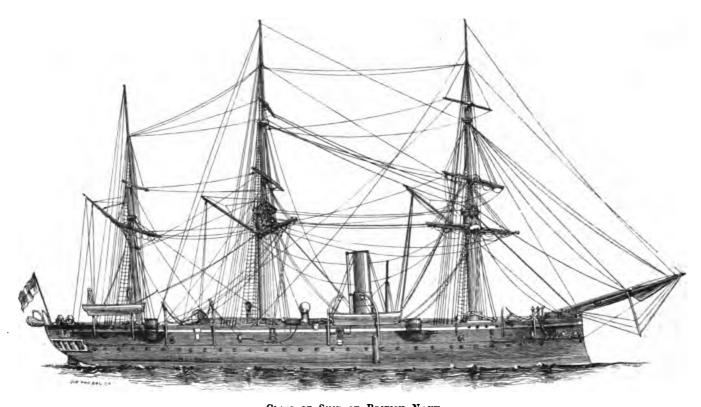
Leaving the commanders-in-chief on the foreign stations to make their own arrangements, let us consider our home organisation.

Should a war be imminent, the Channel fleet would probably be at the home ports. Let us suppose them to be there.

Leaving all the stokers, marines, and artificers on board, I should take 300 men out of the ships *Minotaur*, *Northumberland*, *Achilles*, and *Agincourt*—this gives 1,200 bluejackets. Out of *Excellent*, *Cambridge*, *Vernon*, and

By reference to the list of ships composing the two principal fleets, it will be seen that for the fighting line it will be necessary to commission fifteen ironclads. We may take it that on an average these will each require 205 bluejackets and 70 marines, and it will be necessary to man these ships with our best men. It will therefore take 3,750 bluejackets and 1,050 marines, leaving 4,150 bluejackets and 5,750 marines. As to reserves we have:—

nom we may	•
reak of war	5,000
ditto	5,340
ditto	80
ditto	1,190
ditto	5,890
ditto	nil.
	17,500
	reak of war ditto ditto ditto ditto ditto



CLASS OF SHIP OF BRITISH NAVY.

H.M.S. Canada; protected by under-water decks and raft bodies; 2,380 tons displacement; 10 six-inch B. L. guns; speed 13 knots; representing Cordelia.

Fondroyant we may expect to get another 1,500 who have more or less qualified in gunnery and torpedo work. Out of Duke of Wellington, Royal Adelaide, Sheerness, Chatham and Pembroke we may expect to get another 1,500 men and ordinary seamen. Add to this 3,700 coastguardsmen and 6,800 officers and men of the Royal Marine Artillery and Royal Marine Light Infantry (marines).

This gives a total of 7,900 trained and partly seasoned bluejackets, and 6,800 marines to dispose of.

I have left out the pensioners over fifty, as I think their office will be to recruit for the navy all over the United Kingdom, and to send their recruits to the various coast-guard barracks, to be forwarded from there to the depôt ships, &c., and that these pensioners are not to be sent affoat.

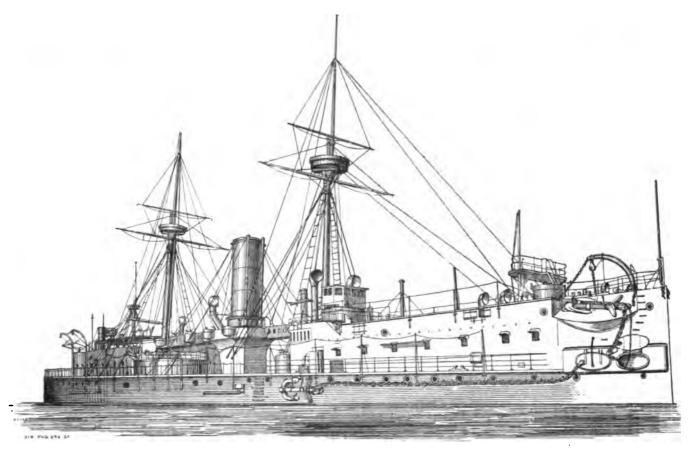
So of the reserves we have 17,500 men at home (all of whom are partially trained and disciplined), to draw upon on an outbreak of war.

Of these I should at once place 500 on board of each of

the ironclads in the third division of the principal fleets, the idea being that on board those ships they could be efficiently trained at sea, and so form a ready reserve to fill any casualties which may occur in the fighting line. Omitting the Impérieuse and Warspite, this takes 3,000 of the reserves, the remainder, viz., 14,500 of the reserves, would be added to the remaining 3,000 bluejackets (450 of them being detained on staffs of depôts and training-school); this gives 17,500 men to be distributed amongst 30 corvettes, 30 sloops, 60 gunboats, and say 60 armed merchant steamers. Taking the crew of bluejackets for each corvette at 150, of sloop at 60, gunboat 20, and merchant steamer 100, we should require 13,500 men for this service,

lastly officers, and it is in these branches that the most serious deficiency exists.

Taking stokers: the fifteen ironclads for the fighting line would require on an average at least 80 or 90 stokers, including engine-room artificers; that is, 1,350 men. Our stoker reserve in the Asia, Indus, and Pembroke numbers some 500 men only! Where are the remaining 850 stokers for the fighting line, and say 3,000 for the other part of the fleets and cruisers, to come from? I suppose it would become a question of market value, and we should have to pay highly for stokers, getting them if we could from the merchant service, and possibly also from the manufacturing districts.



CLASS OF SHIP OF BRITISH NAVY.

H.M.S. Colossus; turreted vessel; 9,150 tons displacement; 4 guns of 43 tons B.L. and 5 six-inch guns; representing Inflexible, Ajax, Agamemnon, and Edinburgh.

leaving 4,000 to be trained at the depôts. As regards the 5,710 marines left after supplying the fighting line, 100 would be sent to each of the depôts to maintain discipline, and the remainder distributed amongst the other ships and vessels, leaving absolutely no reserve excepting a few at the marine barracks to train recruits.

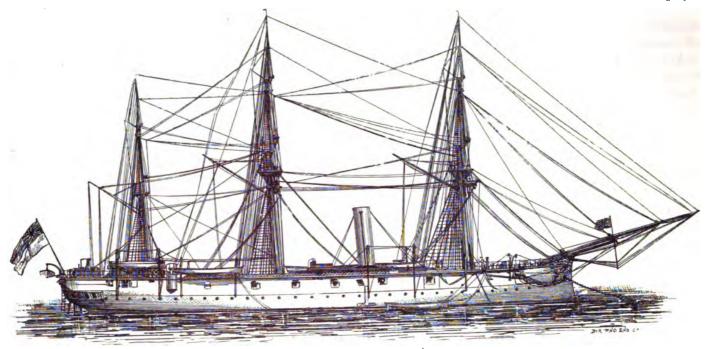
It will therefore appear that as regards the bluejackets and marines, we are fairly provided for on an *outbreak* of war, but we have also to consider the supply of stokers, armourers, and ships' artificers, such as carpenters, plumbers, &c., generally designated as idlers in naval parlance, and

As regards carpenters, plumbers, armourers, and other artificers, this would be another case of market value, as we have absolutely no reserve, and should want some 5,000 or more to man our ships.

The matter of recruiting these men and of getting them into ship-shape, would be a very serious hindrance in suddenly commissioning a fleet, and it appears that this contingency might be met by adopting a somewhat simple plan, which is as follows:—

Increase the corps of Royal Marines by some 2,000 or 3,000 men, and enter men who know one of the trades,

such as carpenter, armourer, &c., let them go through their two years' training at Walmer, and then draft them to sea-going ships; when on board ship these men would now have, which are called non-combatants, would greatly add to the efficiency of the ship as well as her discipline and comfort; and as marines are even now employed

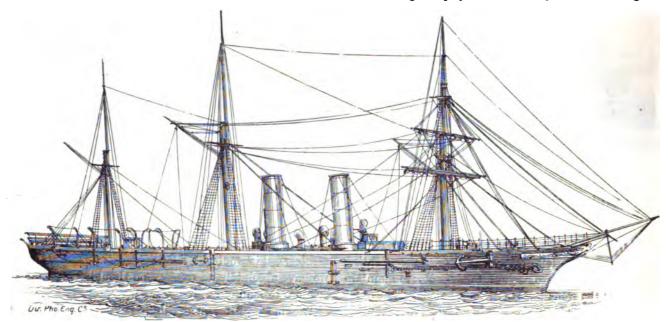


CLASS OF SHIP OF BRITISH NAVY.

H.M.S. Comus; armoured cruiser; 2,380 tons displacement; 12 guns, 64-pounders; speed 13 knots; representing Caryefort, Champion, Curaçoa, Cleopatra, Conquest, Constance.

perform their duties as ships' artificers, and be paid according to the scale now in force for artificers, and would attend their drills once a week in the forenoon so as not to

largely in this manner on board ship without getting any remuneration, and without being less efficient as soldiers, it seems a great pity that this expedient is not generally



CLASS OF SHIP OF BRITISH NAVY.

H.M.S. Iris; armed despatch vessel; 3,730 tons displacement; 10 guns, 64-pounders; speed 18 knots; representing Mercury.

lose the knowledge of their drills, relapsing to ordinary marine pay in barracks. The fact of having excellently drilled and disciplined mechanics instead of the class we

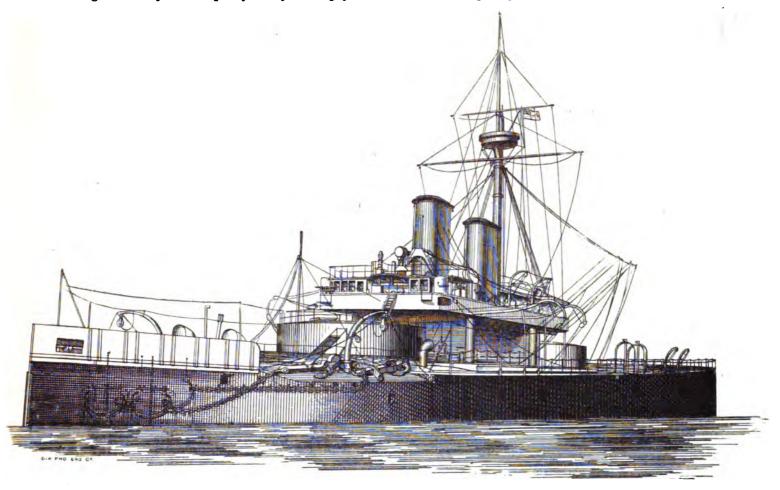
adopted, so that an efficient reserve of these artificers might be formed. The artificers and marines would thus be drafted into the ship to be commissioned as it were together, straight from barracks, and this would save a deal of trouble and complicated organisation for recruiting &c., when artificers were required in a hurry.

As regards "signalmen," there is no reserve of these, but most able seamen have a smattering knowledge of signals, and no doubt out of a new crew an efficient signal staff could soon be collected. However, as it would be of the greatest moment to a fleet to have a smart staff of signalmen in each ship, no doubt it would pay us in the end if we gave a bluejacket a penny a day extra pay for

#### Reserves.

R.N.F	R. Lieutenants	66	we may get	30
,,	Sub-Lieutenants.	80	)) ),	40
,,	Midshipmen	130	» »	60

The pensioned officers of the navy, and those who have left without a pension and who are fitted for employment may be set down as 500, and they comprise chiefly officers of rank of captain and commander. Our first duty is to man the fighting line; this takes 4 admirals, 15



CLASS OF SHIP OF BRITISH NAVY.

H.M.S. Dreadnought; turreted vessel; 10,820 tons displacement; 4 guns of 38 tons; representing type of Dreastation and Thundrer, of 9,330 tons displacement, 4 guns of 35 to 38 tons.

qualifying as "trained signalman" on the same principle as the "trained man" in gunnery.

As to officers in the executive line, we have at present unemployed, and so available for commissioning ships on noutbreak of war, the following:—

### Active List.

	Admirals				•				43
	Post Captains.			٠.					72
	Commanders .								80
,	Lieutenants .	•	•						80
	Sub-Lieutenants								92

post-captains, 15 commanders, 90 lieutenants, and 30 sub-lieutenants, leaving 37 admirals, 57 captains, 65 commanders, 60 sub-lieutenants, and 10 lieutenants.

We have only 21 navigating officers unemployed, of which 4 are staff-captains; of which 15 would be absorbed by the 15 ironclads, leaving 2 for all the other ships.

For the corvettes, sloops, and swift merchant cruisers we should want all the captains and commanders we have, and then be forced to use the Royal Naval Reserve officers in command as well as some retired officers.

The command of the coast defence ironclads and gunboats would entirely devolve upon pensioned officers, it being better to give these officers independent commands than to make them occupy subordinate positions on board larger ships.

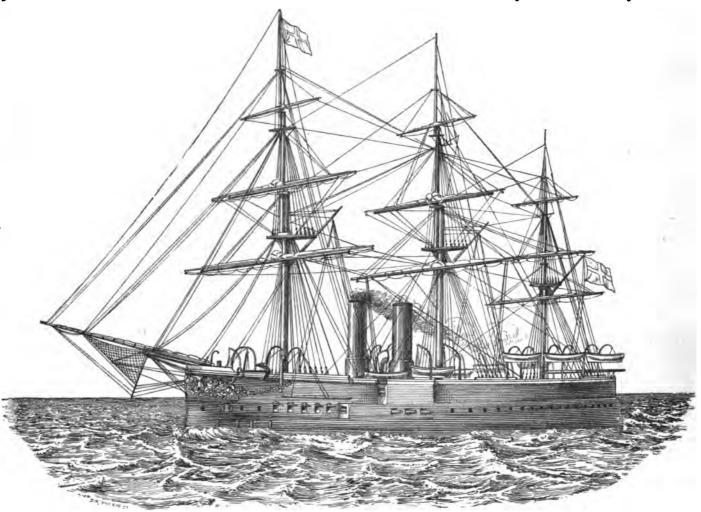
Of Cl	nief Inspectors of mad	chiner	y we have	. 2
,,	Inspectors	,,	"	. 2
,,	Chief Engineers	<b>)</b> )	,,	17
"	Engineers	,,	>7	15
,,	Assistant Engine	eers	,,	<b>4</b> 0

These are at present unemployed and therefore available, but we have no reserve beyond those that are pensioned.

number of temporary engineers from the mercantile marine? And ought we not to have a proper reserve of this most vital arm of the service to instantly supply our needs when war breaks out?

Of doctors unemployed we have only 16; we want on an average 3 or 4 in each large ship, and at least 1 if not 2 on an average in the smaller ships, and say 20 on board each hospital ship; we may, therefore, put down the number of doctors we shall require in addition to those now in the service at 400.

From these remarks it will therefore appear that on an outbreak of war we have just sufficient bluejackets and



CLASS OF SHIP OF BRITISH NAVY.

H.M.S. Alexandra; 9,490 tons displacement; 2 guns of 25 tons, and 10 of 18 tons; speed 15 knots.

Although the number is obviously inadequate to our wants, it must be borne in mind that each of the principal ironclads have a small engineer staff belonging to them, whether in commission or not; notwithstanding this, we should want some 500 or more engineers suddenly if war breaks out. I think 500 is a low estimate, yet our mercantile marine could no doubt supply many; but is it fair to trust the efficiency of our fleet on the outbreak of war to the chance—shall I say probability—of obtaining a sufficient

marines to man our ships and vessels, and none left in reserve to fill casualties.

We have enough admirals, captains, and commanders also for the outbreak, but not for a long war in which casualties might be frequent.

The number of lieutenants is quite insufficient.

Ditto sub-lieutenants.

The number of engineers, engine-room artificers, and stokers, quite insufficient.

The number of ships' artificers, including carpenters, plumbers, armourers, &c., quite insufficient.

The time lost in recruiting officers and men to meet our deficiencies, added to the raw state of the material so obtained would count as a disaster, if we were at war with a nation whose capabilities of suddenly expanding her peace navy to the requirements of war were nearly perfect, and whose reserves were composed of men who had all served in the navy for a few years. And there is such a nation not 1,000 miles from our coast.

The British nation has lately demanded many more ships to maintain our supremacy, but is it any use building more ships, if our *personnel* is not to be increased largely to enable us to man those ships when they are built? A complicated combination of engines and guns in the hands of inexperienced men is as likely to be as dangerous to a ship's friends as she is useless against her enemies.

And it must be borne in mind that it takes almost, if not quite, as long to train and season a man to the requirements of the navy, as now constituted, as it does to build an ironclad.

If, therefore, it is necessary to increase the numbers of our ships, it is absolutely necessary to increase our *personnel* as well, and we ought to do so at once.

"ROYAL NAVY."

# ANNIVERSARIES OF BRITISH VICTORIES.

#### THE ACTION AT SABUGAL IN 1811.

THE morning of the 3rd of April was dull and foggy, when the Light Division, then commanded by Sir William Erskine, forded the Coa, to turn the left of the position held by the French Second Corps on a range of hills commanding the town and bridge of Sabugal. From the obscurity, and the want of precise orders from Sir W. Erskine, the first movements were not well concerted. The leading brigade of the Light Division, under Colonel Sidney Beckwith of the 95th, forded the river and assailed the extreme left of the French position. The advance was covered by four companies of the 95th Rifles and three companies of the 3rd Portuguese Cacadores. These companies had just driven in the French piquets when so violent a rain-storm came on as to stop all movements. The weather soon cleared, and the French saw the smallness of the force by which they were attacked; and they advanced in such numbers that the extended companies were driven back on the 1st battalion of the 43rd. Here Lieutenant Hopkins, who commanded the company of that regiment that first came into contact with the French, showed extraordinary daring and tact. Beckwith's brigade, taking advantage of some low stone enclosures, not only repulsed several attacks of cavalry and infantry, but captured a howitzer by which their advance had been galled. In the meantime, the other brigade consisting of the two battalions of the 52nd and the 1st Cacadores, came up, and the 1st battalion 52nd joining in the fight the position which had been won was secured.

While the French were preparing for another attempt to recover their lost ground, the Third Division under Picton began to arrive on the scene, and advanced against the French centre; and the Fifth Division crossed the bridge near the town of Sabugal. The French then, having their left completely turned by the Light Division, and being assailed in front by fresh troops, retired across the hills towards Rendo, leaving about 300 dead (most of them near the captured howitzer), and as many prisoners. The

smallness of our loss in killed and wounded, only 161, was due to the 43rd taking the utmost advantage of cover, and to the deadly fire of the veterans of the Light Division, by which the enemies' formations were shattered.

There are some points of difference in the various accounts of this action, but they refer to minor details, and do not affect the main features. Napier's description is the most vivid, but that given by Wellington in his despatch is the clearest. He concludes thus:—

"Although the operations of this day were, by unavoidable accidents, not performed in the manner in which I intended they should be, I consider the action that was fought by the Light Division, by Colonel Beckwith's brigade principally, with the whole of the 2nd corps, to be one of the most glorious that British troops were ever engaged The 43rd Regiment under Major Patrickson particularly distinguished themselves, as did that part of the 95th Regiment in Colonel Beckwith's brigade under the command of Major Gilmour, and Colonel Elder's Caçadores. The 1st Battalion 52nd Regiment, under the command of Colonel Ross, likewise showed great steadiness and gallantry when they joined Colonel Beckwith's brigade. Throughout the action, the troops received great advantage from the assistance of two guns of Captain Bull's troop of horse-artillery, which crossed the ford with the Light Division and came up to their support. It was impossible for any officer to conduct himself with more ability and gallantry than Colonel Beckwith."

The British regiments of the old Light Division have a goodly array of recorded victories, and two of them have at least as many more worthy of commemoration. Yet all three might be justly proud to bear the name of an action described in such glowing terms by that great commander who in the moderation of his eulogy presents a striking contrast to some of his successors.

E. O'CALLAGHAN.

## THE DECORATION OF "THE ROYAL RED CROSS."

### MRS. DEEBLE.



FTER the close of the Crimean War there was a natural wish on the part of the people of this country that the services rendered to the army, to the nation, and to the cause of humanity at large by Miss Nightingale, should

be recognised in some way that might be pleasing to her. A national subscription was set on foot. The sum of £50,000 that resulted was placed at her disposal, and with it, she established a Training School for nurses, at St. Thomas's Hospital. The fund is administered by a council appointed by Miss Nightingale, who, it is almost needless to add, takes personal interest in the school and the scholars. Twelve lady probationers and twenty nurse probationers live in the "Nightingale Home" at the hospital, under the superintendence of Mrs. Wardroper as matron. The probationers are enjoined to be sober, honest, truthful, trustworthy, punctual, quiet and orderly, cleanly and neat, patient, cheerful, and kindly; and are expected to become skilful in all matters connected with attendance upon the sick, including cookery. The time-table of duties does not offer much inducement to ladies who are not in earnest; but the following letter addressed to the probationers, shows the kindly and practical spirit in which the school is managed:-

## "MY VERY DEAR FRIENDS,

"Good day; a very good day to you; the very best day I can wish you, and good month, and good year to you all. God bless you. Let us hail our nursing successes together, and not overlooking our failures, on the steps of which we hope to rise to better things, let us press forward. I thank you with all my heart for your perseverance, faithfulness, patience, obedience. Let us hail, too, the successes of other training schools, sprung up, thank God, so fast and well in latter years. But the best way we can hail them is not ourselves to be left behind. Let us, in the spirit of friendly rivalry, rejoice in their progress, as they do, I am sure, in ours—in the spirit of friendly rivalry, I say; for while we run and strive to win the prize, we do not wish them to lose it. All can win the prize. One training school is not lowered because others win. On the contrary, all are lowered if others fail. And this is true of each individual in a training-school too. Let us then 'with a long pull, and a strong pull, and a pull all together,' uphold the good work like good soldiers, not seeking our own way, which ends by our being made prisoners by the enemy "deterioration," nor flourishing our own fancies, but with

steady love and discipline in our own branch of the work, keeping in the corps which presses onward to perfection. To do this we must cultivate our eyes, our ears, our hands, and our brains too, to understand and practise what we are being trained to do.

"A student asked a great painter how he mixed his colours. 'With brains, sir,' he answered. How are we to practise what we are taught? 'With brains, ma'am.' But, you will say, some follow very cleverly with their brains each her own way. Then our brains are pretty nearly useless, if we only think what we want and should like ourselves; in going, for instance, to our posts, and not what posts are wanting us, what our posts are wanting in us. And all for love's sake, for the sake of the great work. What would you think of a soldier who, if he were to be put on duty in the honourable post of difficulty, as sentry, may be, in the face of the enemy [we nurses are always in the face of the enemy, always in the face of life or death for our patients], if he were to answer his commanding officer, 'No, he had rather mount guard at barracks, or study musketry;' or if he had to go as pioneer, or on a forlorn hope, were to say, 'No, that don't suit my turn.' Rather would we be among those who volunteer for a forlorn hope, throw our bodies in the breach, and do each of us what is thought best for all. There are many of you who do say, I wish we were pioneers; grace and strength are given to pioneers. Then I give you joy, for you have your wish. We are all of us pioneers, or may be. Each of us is first to begin that work we are set to do, in ourselves and in the work. It makes a fresh start under our hand,-whether for good or ill depends on the spirit and hand we take to it. A fresh start of obedience. devotion, willingness to be trained, love of the work.

"So God bless you, my very dear friends. I wish I could be among you all, but I hope to see each of you one by one at home. "FLORENCE NIGHTINGALE."

Near forty years ago, William Deeble entered the army as an assistant-surgeon: he became surgeon in 1855, and in August of that year landed in the Crimea with the 56th Foot. In due time he received the medal and clasp for Sevastopol and the Turkish war medal. Subsequently serving in India, he was promoted surgeon-major in 1866, and was afterwards attached to the Abyssinian expedition, in which he met his death. Surgeon-Major Deeble had given much thought to the subject of nursing sick soldiers, and having frequently experienced in his practice the want





MRS DEEBLE,
LADY SUPERINTENDENT OF NETLEY HOSPITAL.

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of trained nurses, his widow was induced to enter upon this sphere of work.

She consequently in 1868 became a probationer in Miss Nightingale's training-school at St. Thomas's Hospital, and in the following year was appointed Superintendent of the staff of nursing sisters at the Royal Victoria Hospital at Netley, in which honourable and responsible position she still remains. During her administration the number of nursing sisters at Netley has increased threefold; the female nursing has been extended to the Heibert Hospital at Woolwich, the Guards' Hospital in Lordon, and to Fort Pitt at Chatham. At present there are twelve of the sisters on duty in our military hospitals in Egypt, and the system has become a recognised branch of the service.

In 1879, Mrs. Deeble was ordered to South Africa in

charge of the female nursing staff, and for her services in the Zulu campaign she received the war medal.

In July, 1883, she was further decorated by Her Majesty the Queen, with a badge of the Royal Red Cross Order. She is one of the very few ladies whose names appear in the official army list; and at the present time one can hardly take up a newspaper without finding her name mentioned. One day called upon to inspect the newest arrangement in hospital ships; another day waiting upon the Queen at Windsor; another day selecting nurses for the front, and providing for their health and comfort on severe duty in a trying climate, Mrs. Deeble has deservedly become a prominent authority in all matters relating to the care of our Sick or Wounded soldiers.

CHAS. J. BURGESS.



## ANNIVERSARIES OF BRITISH VICTORIES.

## THE CAPTURE OF ASEERGHUR IN 1819.

THE Mahratta War of 1817-19 ended with the siege and capture of Aseerghur, a celebrated fortress at the southern extremity of Malwa. It had been taken before by the British in 1803, but the defence on that occasion was very feeble, and the place was still deemed by the natives immensely strong, if not absolutely impregnable when fairly defended. Ascerghur consisted of a pettah, or town, of moderate extent and only partially walled; a fort, called also Malleeghur, which commanded the pettah; and a more important work occupying the summit of a precipitous rock that formed part of the Satpoora Range. The rock was some 750 feet high, and, having been scarped perpendicularly nearly all round, for 100 feet from the summit was inaccessible except at two points where massive works were constructed. Though it was nearly 1,100 yards long, and 600 yards across at one place, from the irregularity of its outline it gave far less internal space than these dimensions would indicate.

Brigadier General Doveton encamped at Numbolah, a few miles from Aseerghur, on the 17th of March, with a force that comprised the 2nd battalion of the 1st Royal Scots, the 67th, the flank companies of the 30th and the Madras Europeans (102nd), eleven battalions of Sepoys (four from Bengal, five from Madras, and two from Bombay), the 3rd Madras Cavalry, details of artillery and pioneers

or sappers from each presidency, and a large body of irregular horse.

Before daylight on the 18th, the pettah was taken, with little loss, by five companies of the 1st Royals and the flank companies of the other European regiments. Sorties from the lower fort on the nights of the 19th and 20th were easily repulsed, but on the latter occasion, Lieut.-Colonel Fraser of the Royals was killed, and the explosion of 130 barrels of powder, near one of our batteries, killed or wounded more than a hundred Bengal Sepoys. When a column under Sir John Malcolm advanced to storm the lower fort early on the 30th, it was found that the enemy had evacuated it during the night.

The siege of the upper fort was carried on vigorously from two sides, and on the 8th of April the garrison, numbering 1,200 Mukranees, Arabs, and Scindees, convinced of the futility of further resistance, surrendered unconditionally. From the skill with which the arrangements were made and the care with which they were carried out, we lost only 47 killed and 257 wounded. The enemy learned to be more cautious after their unsuccessful sorties into the pettah, and kept so closely under cover that, though the artillery fire of the besiegers was very effective, only forty-three of the garrison were killed and ninety-five wounded.

E. O'Callaghan.

# SOME PRACTICAL REMARKS ON DESIGNS FOR SHIPS OF WAB.

BY ADMIRAL SIR GEORGE ELLIOT, K.C.B.



SHALL not, on the present occasion, make special reference to the numerical weakness of our fleet, but confine my remarks to what relates to its production, and to those features of design and construction which affect its efficiency; and as it is evident that the present

Government have no intention of adequately increasing our naval strength, it becomes the more important that such ships as are to be built shall possess those qualities which will render them most efficient in the day of battle. The least that can be said about the fleet we possess is that its obsolete condition and other serious defects, display a lack of skill and foresight which is discreditable to the nation; but as public attention has lately been aroused to the danger of the blunders which have been committed, it is to be hoped that a new departure may be taken and a more careful supervision exercised in the future over our naval expenditure.

In comparing the strength of the navies of Europe, Admiralty officials have adopted the theory that the gross displacement of a fleet represents an accurate measure of its fighting power. But this is dangerously misleading, because by this rule of comparison the gross weight of guns in our armoury might be reckoned as a fair estimate of their efficiency in battle, and thus smooth-bore guns might be pitted against breech-loading rifle ordnance, in the same manner as this theory of comparative gross displacement of a fleet proposes to pit obsolete ships and ships with inferior fighting qualities against an enemy's ships more skilfully designed. Such attempts to bolster up the imperfections of our navy indicate gross ignorance and a low appreciation of the intelligence of our enemies.

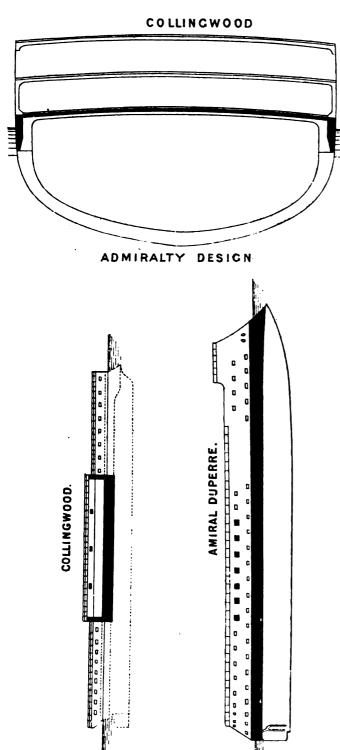
It is evident that the true superiority of a fleet cannot be estimated by its gross tonnage, but by the perfection of those features which constitute efficiency in each class of ship for the special duties required to be performed. It is well known that in these days of scientific warfare, the skilful employment of weight is of the essence of efficiency, and hence has arisen the outcry against unprotected ends and inferiority of speed and gun power in the ships we

possess. I say unprotected ends, because not only are they unarmoured, but the substitute plan of a raft body has not been carried out, nor its accompanying feature, of armourplated bow and stern to deflect raking fire. Therefore all these lately-built armour-clads are deplorably inefficient. That armour-clads have become obsolete in a few years, is attributable to not having recognised the certainty that this system would only introduce guns of greater power. Unfortunately the experience of the past has not yet convinced our authorities of the imprudence of risking the life of our ships to a chance shot from an enemy in battle, when the same weight of iron employed in the Cellular Deck principle of protection would greatly reduce the danger and prove equally effective against guns of any calibre. I desire particularly to call attention to one most important consideration which materially affects the comparative value of the two systems of water-line protection, namely, Belt Armour and Cellular Deck construction, which is, that whereas the weight of armour which is available for defence must be absorbed by the belt in order to offer any reliable protection, the Cellular Deck system, by economising weight at the water-line, enables a larger amount of armoured protection to be afforded to other parts of a ship where it is most valuable for fighting efficiency, such as:-

- 1. Armour-plating round the bow and stern as a protection against raking fire.
- 2. Stouter armour on barbettes and conning towers for gun protection.
- 3. Safety screens and traverses and stouter skin of ship on battery deck, for protection of the crews.

This unfortunate craze for outside armour of whatever thickness is going to be perpetuated in our latest designs for armed cruizers, whose water-line belt protection is to be only ten inches thick! And this constitutes the sole defence which will stand between the magazines and boilers and the guns of the enemy, in fact between life and death of a ship. The table accompanying this article shows the penetrating power of the guns now in use, and which will have to be met with on the high seas. The BL eighteen-ton gun has penetrated thirteen inches of

compound armour at 1,000 yards, the forty-three-ton gun sixteen inches, and the sixty-three-ton gun twenty-two inches, and the 100-ton gun twenty-four inches. It is more than probable that ocean cruizers will be armed with



the forty-three-ton or even the sixty-three-ton gun; in fact there is no reason that guns of that weight should not be mounted in a gun-boat. Oh! but say the armour-platists (or fatalists, as I call them), these penetrations are only obtained by direct hits, which will be very rare in action, and gun-fire is not accurate, and the ten-inch armour will deflect all projectiles striking at oblique angles of inclination and resist all light guns and machine guns which will play dreadful havoc with your raft body, and let in water, and your ship will be sunk; therefore, we will take the chance of direct hits reaching our magazines and boilers, because, taken altogether, we consider that the odds are in favour of the belt of armour.

In reply to these views of comparative security, I feel confident that experience will show that direct hits will not be so few and far between, especially in fleet actions, and that gun-fire will be accurate enough at close quarters, which, if desired by one of the combatants, can only be avoided by a stern fight which must prove fatal as against the armour-plated bow of the cellular-deck-protected As regards machine gun-fire, a two-inch steel outer skin of ship at the water-line round the raft body will afford sufficient protection, and the coffer-dam sides will facilitate the closing up of shot-holes. The numerous cells will take a great deal of riddling before buoyancy is endangered, whereas shots through the teninch belt will defy all repair, and let water into large buoyancy spaces even if they do not cause immediate destruction by reaching the magazine or boiler. In olden times in broadside to broadside fighting with far more numerous guns at work, water-line shot-holes were plugged, and ships were seldom sunk in action, but otherwise disabled. They had no such protection as the raft body will afford, and the advocates of thin armour must remember that in those olden days ships had no boilers, and round shot and shell could not reach their magazines, whereas shells from the powerful guns now carried at sea could effect that object after passing through ten-inch armour, or create great havoc. This would be provided against by a strong covering deck. There is no doubt a charm about armour protection, but it is likely to become less favoured in the future than it has been in the past, because the demand for a high rate of speed must reduce the weight and therefore the thickness of armour a ship of moderate displacement can carry. The ram and torpedo attack militates against monster ship building, and of course the thickness of armour is limited by the size of ship and other essential requirements. The great recommendations of the cellular-deck method of protection to buoyancy are, that it economises weight and thus enables armour to be placed round the bow and stern to deflect raking fire, also stouter armour on the barbette towers and conning towers, and shelter screens and traverses on the battery decks, and that the protection afforded is not rendered obsolete by any increased power of gun.

Our fleet certainly displays every variety of type, which only indicates that our Admiralty have had no settled programme and have not realised the real wants of the navy of England; great mistakes have been made, but it is unfair to cast the whole blame upon the constructors, because the Naval Lords of the different Boards of Admiralty are responsible for all imperfections which have arisen from practical errors of judgment approved of during their period of office.

The blunders committed by different Boards of Admiralty go far to support the impression which exists, that a wider scope of professional and scientific investigation would have insured a more enlightened policy in the ship-building department of the navy. The rapid progress of science is always brought forward as the cause of repeated changes, but as regards the strife between guns and armour there is nothing but what might and ought to have been foreseen. With the exception of the committee on designs for ships of war in 1871, no comprehensive inquiry has been held outside the Board of Construction, and the recommendations of that committee were never carried out even as regards their urgent request that experiments should be made in order to obtain information by practical tests on different important features of design and construction-These experiments, costing only a few thousand pounds, would have prevented blunders which have wasted millions-Science will always be in a progressive state, but the direction of that progress generally easts its shadow before, and prudence and foresight will shape a right course to forestall the event. But our Building Department have never seen further than the immediate future in the matter of armour-plating and speed or torpedo defence, and even now, they do not seem capable of rising to the occasion. The nation has hitherto relied almost entirely on the principle of intrusting the great and intricate question of designing ships for the navy, to the exclusive judgment and decision of existing Boards of Admiralty, and looking to the unfortunate result of this exclusive system, it is surely time to adopt a system of wider investigation and more careful supervision.

All efforts which have hitherto been made, both in and out of Parliament, to bring the highest talent of the nation to bear on the decisions of the Admiralty by committees of inquiry, assisted by practical experiments, have been met by strenuous opposition on the score of expense, and vast sums of money have thus been wasted on faulty principles of design and construction of ships of war.

The simple question of the relative value of outside armour and cellular-deck protection, if brought to the test of actual experiment by firing at targets accurately representing these competitive methods of gun defence, would long ago have satisfied all doubts on the subject. Exhaustive experiments on different modes of torpedo defence would also have thrown light on what possibly can be done to protect the bottoms of ships from the destructive effects of this deadly weapon of offence, and surely one of our obsolete ships could not possibly have been put to a better use.

As a first step in this direction, a Royal Commission

should be appointed at once, to report upon the entire question of the classification of the fleet and the designs of ships of war, and on the separate question of whether in future, some permanent committee of scientific and practical men should not be constituted to examine and report upon all designs before they are submitted for the decision of the Board of Admiralty.

I would here refer to the fact that when the question of clothing ships with outside armour first arose in consequence of the introduction of this principle by the Emperor of the French, after the Crimean war, the desirability of adopting this mode of protection against the gun attack was fully considered by the Royal Commission on National Defences; and as a member of that commission, I thought that the readiest means of arriving at a sound judgment before entering upon such a novel feature of naval architecture, was by an examination of the most competent witnesses capable of deciding what was likely to be the result of the competitive conteution between armour and guns. This contention seemed clearly to resolve itself into the simple question of the limit of the power of the gun of the future, and the limit of the weight of armour which ships could carry without such sacrifices of other qualities as would render its use injurious, or at least unadvisable.

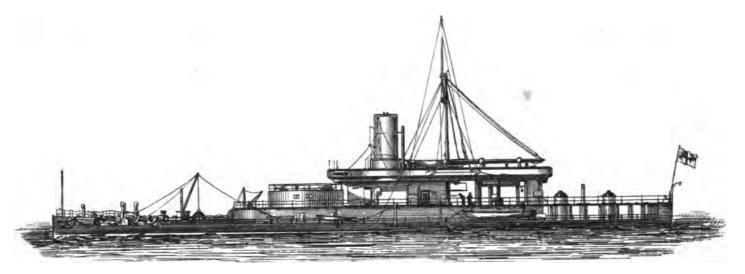
On the question of the future available increase of gunpower, Sir Joseph Whitworth and Sir William Armstrong were both of opinion, that if armour-plating invited increase of gun-power, the gun to pierce the armour used, would always be found ready before the ship could be launched, provided that the money was forthcoming for the manufacture of the gun. In fact, it was simply a question of money as regards the limit of the power of the gun.

On the other side, as regards the limit of the thickness of the armour-plating a ship could carry, this question appeared to be readily solved by the amount of displacement of size of ship which could be reached without becoming actually objectionable on account of loss of other fighting qualities. It appeared, from inquiries made, that a thickness of twelve inches of iron would necessitate a ship of 10,000 tons' displacement, with fourteen knots speed, and even then with armour only applied to an all-round belt and on the turrets, and that whilst on the one side, ships of these dimensions would represent an extreme limit of size for fighting in fleet actions, on the other side, the gun to penetrate at long ranges twelve inches of iron could readily be supplied. For the reasons above named, the commissioners recommended that ironclad forts in the sea should be erected at Spithead for the defences of Portsmouth, upon which thicker armour could be placed if required.

Now, I know that I shall be met with the opinion that foreign nations having commenced to build armour-clads, England was obliged to follow in their wake; as the

object of this paper is especially to deal with present emergencies, I would desire to avoid finding fault with the past any more than is actually necessary to elucidate some of the causes of the unsatisfactory position in which we now stand. I am, therefore, willing to admit that some excuse may be allowed for that want of foresight which has induced this country, as a matter of expediency, to enter into the race of armour-clad shipbuilding in competition with other nations, notwithstanding the fact staring us in the face, that the gun would be produced capable of easily overcoming the stoutest armour that could conveniently be carried to sea. As, however, the evidence of the superiority of the gun has for some time been realised, and as the efficacy of the ram and torpedo has become more developed, I cannot admit that there has been sufficient excuse of late years for continuing to fight a losing game, and that it would have been more creditable to our naval designers to have recognised this fact, and to have

present crisis, it is of supreme importance that the value of the proposed substitute mode of protection should carefully be considered on its merits, and brought to the test of practical experiment. It must be borne in mind that those who advocate the disuse of weak outside armour as an obsolete and dangerous protective agency, still adhere to the use of armour-plating when applied in such manner as will enable it efficiently to carry out its purpose, viz. to prevent fatal disasters or to render their occurrence less probable. As this result can no longer be obtained by armour-plates placed vertically on the outside of a ship unless of great thickness, and as ships of moderate dimensions combined with great speed and coal-carrying capacity can only bear the weight of comparatively thin armour, its continued use has greatly lost its value. The ram and torpedo strongly point to the improvidence of monster ships built solely with a view to gun-attack and defence, regardless of the increased exposure thus entailed to fatal



CLASS OF SHIP OF BRITISH NAVY.

H.M.S. Glatton; type of coast-defence monitor; 4,900 tons displacement; 2 guns of 25 tous.

engerly encouraged the introduction of some such substitute plan of protection for war-ships as has been proposed by those who have opposed the continued use of side-armour.

This contention is mainly based on the broad principle that the prominent part which the ram and torpedo will take in the result of fleet actions, points strongly to the desirability of limiting the size of ships which prohibits the use of armour of sufficient thickness to afford any reliable defence against modern artillery.

However, there has been some evidence of wavering of late, and the present demand for a much higher rate of speed than has hitherto been deemed essential, will necessarily still further limit the weight of armour which ships can carry; whilst at the same time, the increase of gun-power has rendered the dependence on outside armour less reliable than ever. Therefore, at the

injury from those other more deadly weapons of offence; opinions appear to be setting in in favour of ships of more moderate pretensions, which strengthen all the arguments in favour of the proposed substitute mode of protection.

It may be well, therefore, to state emphatically that those who propose to abandon side-armour, do so because they consider that a far more efficient protection will be afforded by utilising an equal amount of iron-plating in a different manner. It must be evident to all, that a crisis has arisen in naval designing of an alarming character, owing to the general use of sea-going torpedo vessels, and to the gun having asserted a decided superiority over any possible combination of wood and iron which it is practicable for a ship of acceptable dimensions to carry in the form of an all-round belt. Hitherto outside armour has been applied with at any rate the professed

intention and expectation of resisting penetration; but now that this object is no longer obtainable, this partial protection is still advocated on the ground that perforation is limited by distance, and direction, and nature of fire!!

I would invite those who are committing the country to an expenditure of millions of money on such considerations as these, to give a practical definition of the value of such limitations. It appears to me that they are dangerously deceptive, because by no tactical skill can a combatant select to fight at long range, except by turning away from his opponent, which must eventually result in a stern fight greatly to his disadvantage. I therefore maintain that between two ships having equal speed, close action and direct fire cannot be avoided, and so long as penetrable armour invites the adoption of the most powerful ordnance, so long will the heaviest guns have to be encountered as a part of the armament of ships of war. If the water line is penetrable, one projectile may decide the fate of an armour-clad, either if it reaches the magazines or boilers, or if it causes a large aperture, on entering or leaving the ship, for the admission of water into the hold. In fleet actions there can be no question about close quarters and direct bits. I agree that the "dogma of invulnerability is untenable," and I could understand such a makeshift as penetrable side-armour being accepted, if no more effectual security to the vitals of a ship could be attained by any other system of defence; but I hold it to be an essential element of fighting vitality, that the magazines and boilers should be rendered as invulnerable as possible. I maintain that this can be more securely effected by covering these danger-points with a deck (placed some five or six feet below water) of sufficient thickness to deflect any possible projectile, than by an outside coating of armour easily penetrable under known conditions of attack, which are certain to be selected by an opponent, and impossible to guard against.

No doubt this deck would absorb so large a portion of the weight available for protective purposes, that it involves the necessity of abandoning any outside coating of armour; thus it has been argued that increased security to magazines and boilers by a deck covering, is only obtained at the sacrifice of a considerable amount of protection against being sunk by the inlet of water through shot holes about the water-line, and that it is therefore only a choice between two evils. Great stress is laid on this point, but it entirely omits to notice that a prominent feature of the alternative plan, is the provision of safety against any dangerous inlet of water which is afforded by a cellular body of ship extending from six feet below, to six feet above, the water-line, and which secures a great reserve of buoyancy, and admits of a ship being extensively riddled about the water-line before any danger of sinking would arise.

N.B. The cells would probably be in dimension about twelve feet (cubes).

This feature of fighting vitality, namely, "limitation of the admission of water," requires to be very closely examined, before coming to judgment on the respective values of the two systems; but if the verdict is made to depend upon the amount of injury which each ship promises to endure without its efficiency being seriously impaired, I consider that the advantages claimed for the armour-clad cannot be compared in point of importance, with those which promise to be obtained by the adoption of the cellular-deck system.

Thin side-armour may be proof against all the lighter descriptions of ordnance even at close quarters, and against the direct fire of powerful guns at very long ranges. Up to a certain point it may be proof against oblique firing from all artillery, but even in these respects there is no fatal issue involved in the adoption of the "raft body," as it may be extensively riddled without endangering the ship; while at long ranges, a ship can be perfectly defended by the "end on" position if armour-plated round the bow and stern, which is one feature of the proposed substitute plan of defence. Her object, however, will of course be "to close," and I would ask how will the question of comparative safety then stand?

The comparative danger arising from shot-holes which admit water, must be measured by the space opened out by the projectile for the admission of water at the point of penetration, and by the space opened out within the ship to contain water. If one large projectile should penetrate an armour-clad at or below the water-line, a very large aperture will be made, and a very large portion of the hold will be opened to the sea. It is difficult to imagine that such a hole could be stopped; whereas, on the other side, if a number of projectiles of equal size were to penetrate the cellular body of a ship, the aperture would be small, and the amount of water which would enter from the sea would be limited to the space contained in the number of cells perforated, and reparation of damages by plugging shot-holes might be continuously carried out as in days of yore, or the ship might haul off to repair damages and go at it again.

I would argue, therefore, that whilst one direct hit from guns now in use, at the water line of an armour-clad, would probably sink her if it did not blow her up, the raft-bodied ship could not be so easily disposed of, and as regards those other perforations which the latter would have to accept and from which the armour-clad would be spared, there is no fatal issue involved as regards the chances of being sunk. I therefore hold that the balance of safety will be greatly in favour of the ship with no side-armour. The existing thin-armour deck which is the only defensive covering to the armour belt which an armour-clad can afford to carry, is an element of vulnerability too conspicuous to be lost sight of by naval experts, in contemplating the effect of depressed fire from barbette guns at close quarters. The raft-bodied ship would naturally not

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waste her powder upon oblique firing; her duty would be to maintain as much as possible a bow presentation, and seek to close her armour-clad opponent, when direct hits would not be the exception. Depressed fire from monster guns would prove the fallacy of placing dependence upon a system of protection based on "limitations of distance or direction, or nature of fire."

Side-armour struck in reverse by heavy solid shot, will be one of the most fatal incidents of future battles, especially when ships are rolling.

Having now considered this question of comparative invulnerability under three different heads, namely; first, protection to magazines, boilers, and engines; secondly, protection to the ship from being sunk; thirdly, protection to guns, I would submit as an urgent necessity, that before launching into a large expenditure of money on the new belted cruisers, experiments should be carried out to ascertain the amount of destruction which would be caused by projectiles penetrating a vessel protected by side-armour of ten inches maximum thickness at the belt, and only eight and six inches on the battery, and compared with the injury caused to a raft-bodied ship, with the same gross weight of armour protection utilised in the substitute plan proposed. The fate of magazines and boilers should at the same time be ascertained. I should not mind laying long odds on the latter plan of defence.

To advocate the continued use of side-armour on the assumption that such weapons as the 43-, 63-, and 100-ton guns "will be few and far between," in my opinion, only shows how strong is the temptation to hang on to old expedients, rather than face the necessities of the future. Surely the experience of the past, must teach us that neither the cost nor trouble of producing such guns will limit their general use, if their services are called for by the continued use of penetrable side-armour. The same thing has been said of the 12-, 18-, and 25-ton guns. It is this want of foresight that has left us with an obsolete fleet which dare not confront a few gun-boats such as I described in No. 5, Volume I., of this Magazine, with a 43- or a 63-ton gun placed behind an impenetrable shield, as a substitute for coast defence monitors of the Glatton type, and for the very vulnerable and therefore inefficient class of gun-boats we possess.

I consider that the possibility of converting some of the existing side-armour ships into raft-bodied ships should be carefully ascertained, selecting in the first place those with the thinnest armour, from four to six inches, such as Warrior, Minotaur, &c. It may be possible in this manner to render these ships really formidable in a short space of time. In the present "obsolete condition" of the fleet, it is frightful to contemplate the sacrifice of life which must result from sending those ships into battle. If it be possible to afford increased protection, not a day should be lost in making a beginning. For to meet such a question as this, by the argument that other nations

are no better off than ourselves, is not a statesmanlike or humane view to take of the situation.

#### Classification of Ships of War.

In all times past, the navies of the world have consisted of different classes of vessels intended for special services, and each class of vessel has had its own peculiar qualifications, and credit was due to the designer, so far as he succeeded in excelling in those specialities which rendered a war-ship the most efficient of her class. Warships have always been classed according to size or tonnage, but it so happened that before the days of steam, as their fighting power was reduced, greater speed was obtained so that the frigate could outsail the line-of-battle ship, and the corvette could hold her own with the frigate, and even the brig and schooner and cutter had the best of it in beating to windward.

This law of safety, which is one of common sense, has disappeared in our navy with the days of steam power and armour-plating; and speed, the only means of escaping capture, has diminished pro rata with the decrease of fighting power of ships; and this not of necessity, but from the tactical errors of judgment which have been displayed. This law of safety is one which the commonest prudence would point, out as too important to be disregarded; yet it would appear that the naval world has lost sight of war requirements, or as if plating ships' sides had entirely produced a change in the character of naval warfare.

It is the province of the executive officers at the Board of Admiralty to provide their naval constructors with clearly-defined instructions for the classification of the fleet, and on those tactical features of design which constitute fighting efficiency, which do not come within the scope of the experience of the naval architect. For this purpose, I have always suggested the great advantage of a table of classification being provided, such as I supply herewith, showing in detail the standard of efficiency for each class of war-ship which may be required to be built, and which marks, in their numerical order of importance for each class, those special features of design wherein each class should excel as being best adapted to the services required to be rendered.

The naval lords would then be held responsible for this programme, and the constructors on their part answerable for the skill displayed in carrying out these conditions to the greatest advantage.

Duties and responsibilities have been hitherto unfairly thrown upon the shoulders of the non-professional officer, who has been brought into a position of prominence with regard to matters beyond the scope of the experience of a naval architect.

I consider that all the services required to be rendered by the navy of England, both in times of peace and war, can be efficiently fulfilled by dividing the fleet into five distinct classes, not reckoning flotilla; namely, one class of armour-clad for fighting in line-of-battle, and three classes of cruisers for colonial defence and protection of commerce, and a fifth class which I designate ocean-coaling depôt ships. This latter class, which will be a most essential requirement, should be lightly armed and protected, and for safety, should possess the highest rate of speed combined with great coal-carrying capacity, and on the outbreak of war, should be at once improvised from the mercantile marine, and employed as station ships at fixed rendezvous.

The speciality of the line-of-battle ship is for fleet actions. The speciality of the first-class cruiser is for colonial defence, that of the second-class for guarding the central points of trade routes, and that of the third-class for wider distribution to protect the lines of commerce.

It will be seen by reference to the table of classification at end of article, that a specified speed and coal capacity, displacement, and gun power, are made obligatory for each class, which conditions the architect has to comply with, and this necessarily will regulate the remaining weights available for armour. But I hold that it is necessary that these specified features of design should be stipulated for, as being essential conditions of a-well devised system of classification. The heaviest guns are only mentioned, as the lighter guns are more a matter of detail.

The *Liner* as proposed, is a short handy ship, with great rudder-power, of moderate displacement and limited speed, stowage, and sail-power, with cellular deck water-line protection, four or five inch deck; two cone-shaped barbettes, each mounting one 100-ton gun, protected by twenty-inch armour; two conning towers, sixteen-inch armour; skin of side on battery deck two-inch, and on safety screens and traverses; bow and stern armour-plated round, and from upper deck downwards to below armoured deck, eight inch tapered; a fixed crinoline torpedo protection. (See Plate and description at next page).

The vessel intended only for fleet actions in European waters.

The First Class Cruiser. The properties of this vessel as proposed differ from the liner as follows:—Greater speed and displacement, and length of hull and stowage, and sail power, but somewhat less powerfully armed and protected, and less draught of water, (see table). This vessel is intended for colonial defence. I consider that it would greatly deteriorate from other essential qualities, to limit draught of water for Suez Canal passage.

They are intended for colonial defence. A small squadron of these swift, powerfully-armed vessels should be attached to each line-of-battle fleet.

The Second and Third Class Cruisers. These vessels, intended for the protection of commerce, should possess the highest attainable speed; for their other qualities in order of importance, see table.

1. In deciding the qualifications for each class in their numerical order of importance, I have placed sea-worthi-

ness as No. 1 in all classes. I support that opinion, on the grounds that it is due to the crews who man the ships and have to contend against a dangerous element, that they should have perfect confidence in the safety of their ship in all weathers.

2. Then in the liner I place handiness as No. 2, because the power of turning shortly, that is, on a small arc of a circle, is an element of safety when ships have to manœuvre in compact masses, and essentially an element of superiority in ramming. I place guns and armour as No. 3, to make her the highest standard of gun attack and defence, consistent with handiness I have named, and the largest amount of displacement which I deem to be admissible with due consideration for the occurrences to be met with in fleet actions at sea.

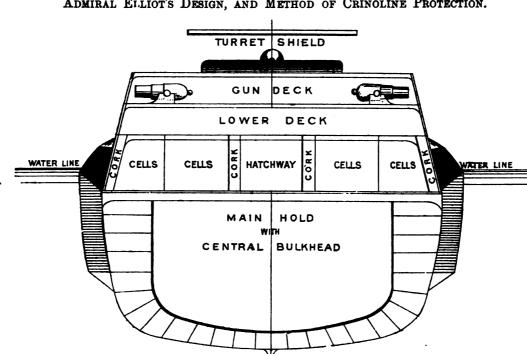
I place steaming No. 4, because for purposes of fleet actions, great speed is not a prominent feature of fighting efficiency. Stowage has a low number, 5, because the line-of-battle ships are designed for European waters. Sailing properties, No. 6, have a low value, for a very moderate sail power will suffice, and light draught of water is placed last because it can only be obtained by a sacrifice of more essential qualities.

It may be found necessary to revise this table from time to time, in order to meet the changes which the progress of science may introduce, or in order to compete successfully with similar classes of ships adopted by other naval powers. But this system of classification would always tend to regulate responsibility between the practical and scientific elements of man-of-war designing, and such definite instructions on tactical points of efficiency are only what the naval architect is entitled to receive for his guidance. With a view also to bring the highest intellect of this great maritime nation to assist in producing the most perfect ship of war of each class, our great shipbuilding yards should be invited to compete for designs on the lines indicated by the table of classification adopted, which designs should be submitted for judgment to an independent and competent tribunal of experts.

The unsatisfactory condition of our existing fleet may be mainly attributable to the neglect of Boards of Admiralty to supply the Construction Department with a classified programme for their guidance. The non-professional officers of this Department have of late years been left to instruct the naval lords, instead of receiving definite instructions themselves, and thus have been placed in a false position. Yet in former days some of our best ships were designed by naval officers. It may be assumed that the voice of the nation will (it is to be hoped not too late) compel the Government, nolens volcns, to greatly strengthen our defensive armaments by land and sea, and it is highly necessary that a new departure should be taken in the conduct of naval affairs. The first reform that is required, is to restore the Board of Admiralty to its former professional character and relationship with Parliament, and

it is not possible to describe what should be done for the navy in terms more accurate and conclusive than those which appeared in the Pall Mall Gazette of the 14th March, which were summarised as follows.

- "1. That a Royal Commission should be immediately appointed to inquire into and report upon the strength of the Navy, and the mode in which it is administered.
- "2. That the constitution of this Commission should be as influential and representative as possible, special care being taken to secure an adequate representation of naval officers, engineers, private shipbuilders, and of our colonists.
- "3. That the scope of this Commission should include the following questions under the first division: (1) What
- element in naval administration. (5) The establishment of an adequate Intelligence Department. (6) The organisation of the fleet for war. (7) The creation of a consultative committee on designs, and development of competition between the Constructive Department and private ship-builders, whether by an independent committee of advice or otherwise. (8) Dockyard administration. (9) Our system of reserve. (10) Arrangements for manning and training seamen.
- "5. That among other questions on which the Commission could bring to a focus the best opinion of the country are—(1) Maritime capture. (2) The bombardment of open towns. (3) Is food contraband of war? (4) The supersession of the ironclad. (5) The distribution of armour



Admiral Elliot's Design, and Method of Crinoline Protection.

should be the normal establishment of our navy, and what relation should it bear (a) to the navies of other Powers afloat and on the stocks, and (b) to the extent of our empire, the increase of our responsibilities, the growth of our commerce, and our increasing dependence on supplies of food from over sea. (2) What should be (1) the normal programme of construction, and (2) the recognised proportion which one class of ship should bear to another.

"4. That under the second division of Organisation and Administration there shall be included:—(1) The organisation of the Board of Admiralty. (2) The repeal of Mr. Childers's Minute. (3) The extent to which decentralisation is possible. (4) The infusion of a naval

(6) The possibility of blockade under altered conditions. (7) Coaling facilities (a) in port, (b) at sea. (8) The protection of merchantmen by convoy or otherwise. (9) The possibility of utilising mercantile auxiliaries. (10) The hire of transports. (11) The growth of the noneffective vote."

While the Commission was sitting the Admiralty would feel itself on its trial, and would therefore naturally use every effort to push forward as rapidly as possible all the ships it has already in hand, and execute the programme to which it is already committed. Thus no delay would be caused, and a solid foundation provided for future

GEORGE ELLIOT.

#### DESCRIPTION OF SIR GEORGE ELLIOT'S DESIGN.

This fixed crinoline torpedo defence can be applied to armour-clads already built or building. Its weight would be about twenty tons, and it would cause a loss of speed, according to the late Mr. Froude's calculations, of one-sixth of the full speed. A block or fender of wood or iron construction is fastened round the ship's side to form a recess below the water line of five feet in depth, from which downwards for fifteen feet a fixed crinoline is fastened to the ship as follows:—Stays of two-inch steel rod are screwed into the ship's side with eyes at the end through which horizontal one-inch steel rods are rove, and then vertical half-inch rods of short lengths are fastened to the horizontal rods with nuts and screws for removal or shoring ship when docking.

It is known that a fish torpedo, exploding in contact with any inclosed floating body exercises its greatest power of destruction, and also that a cushion of water between the bursting charge and that body is the best agent for dispersing and lessening the explosive force. Hence there is reason to believe that the proposed plan for presenting a water cushion, and deep cellular side, and stout inner skin of ship, say two inches steel, would save a ship from vital injury.

It may be said that the crinoline would collect weeds, but as they float on the surface they could easily be removed.

The loss of speed could only be admissible for that class of ship intended for the line-of-battle, where great speed is not an element of fighting power, and all other classes having sufficient speed and sea-room can manœuvre to resist torpedo attack by gun-fire. This crinoline protection need not be worn except on the approach of war, when, if ready, it could be quickly applied. The vital importance of some greater protection for line-of-battle ships fighting together in compact masses against the attack of torpedo vessels points to the urgent necessity of causing exhaustive experiments to be made, in order to obtain practical results, which may lead to the adoption of some method of contending against these deadly weapons of offence.

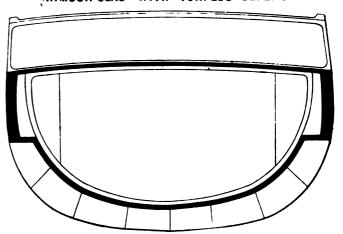
As yet nothing has been done in this direction, and it may be asked, Who are responsible for this neglect? Is this also a matter about which the naval lords of the Admiralty are not responsible? Hanging screens are useless for ships under weigh, and that is all that the Admiralty have attempted to do to protect our ships against torpedoes, beyond dividing the hold into more numerous compartments.

The ship designed by Sir Edward Reed, K.C.B., with

side-armour and for torpedo defence, he describes as follows:—

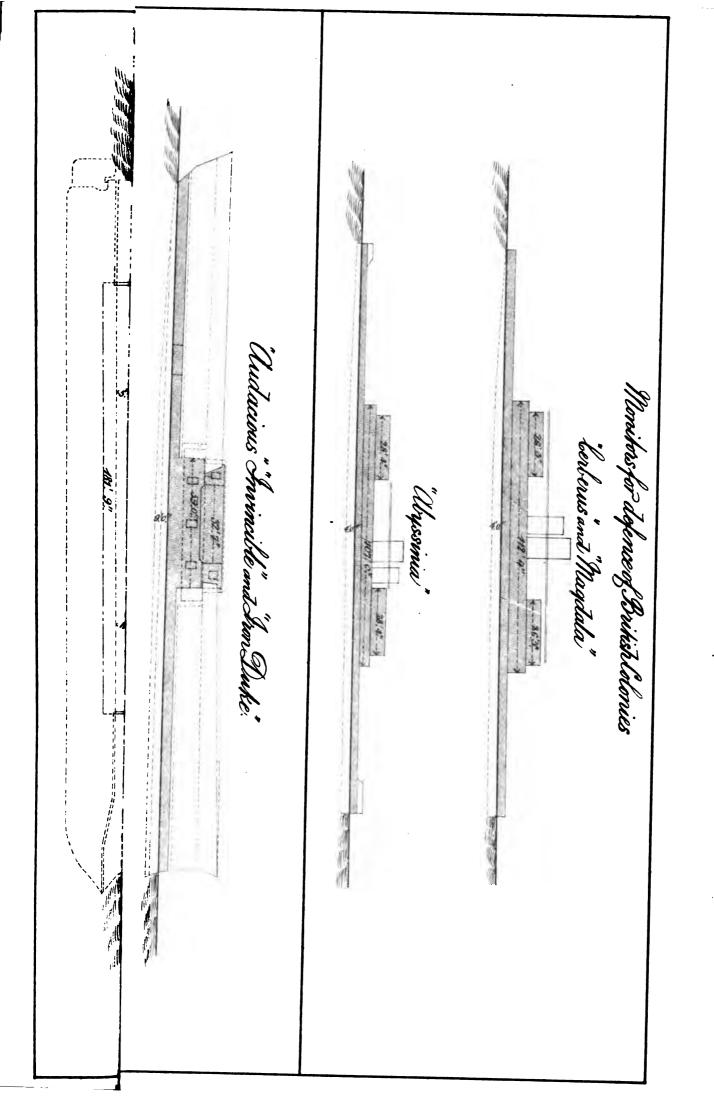
"One method of supplying this torpedo-defence (in conjunction with great subdivision) to which I attach very great value, and from which it will be seen that an armoured deck or inner bottom (say, four inches thick near the armour belt, and tapering down to, say, two and a half or three inches towards the keel), sweeps entirely underneath the whole machinery, boilers, and magazines of the ship at a considerable distance from the thin-plating of the outer bottom. The space between the thick-armour bottom and the thin outer bottom is greatly subdivided, both transversely and longitudinally.

#### ARMOUR-CLAD WITH TORPEDO DEFENCE.



Designed by Sir Edward Reed, K.C.B.

The naval torpedo will be stopped and compelled to explode outside of the outer bottom, and the debris of that bottom will be dashed against the inner armour, which will, of course, be vastly more difficult of penetration by this débris than the ordinary 3-inch steel plating which at present is all that separates the boilers, &c., from the outer bottom. Of course ships built with the additional armour defence against torpedoes, shown in Fig. 4, can possess also the same inner thin steel bulkheads as other ships, and also all such protection as nets, screens, &c., can provide them with. A glance at the design will show that this system of construction (which works out very satisfactorily as regards weight, &c., in several designs which I have prepared) likewise possesses very great incidental advantages. both by preventing a shell from getting into the ship below the belt (by glancing it off), and by localising the injurious effects of ramming.



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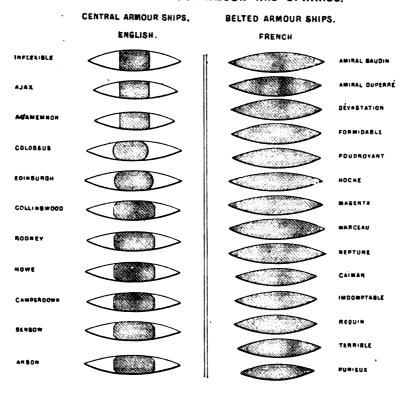
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## SHIPS WITH 15 INCH. ARMOUR AND UPWARDS.



# CLASSIFIED PROGRAMME FOR SHIPS OF WAR, WITH QUALIFICATIONS OF EACH CLASS IN THEIR NUMERICAL ORDER OF IMPORTANCE.

CLASS.										
LINE-OF-BATTLE SHIP.	1st Class Cruiser.	2nd Class Cruiser.	3rd Class Cruiser.  Displacement, 5,000 tons							
Displacement, 9,000 to 10,000 tons.	Displacement, 11,000 to 12,000 tons.	Displacement, 8,000 tons.								
Speed, 14 knots.	Speed, 18 knots.	Speed, 20 knots.	Speed, 20 knots.							
Guns, two 100-ton.	Guns, two 63-ton.	Guns, two 43-ton.	Guns, two 25-ton.							
	QUALIF	ICATIONS.								
1. Seaworthiness.	1. Seaworthiness.	1. Seaworthiness.	1. Seaworthiness.							
2. Handiness.	2. Handiness. 2. Steaming.		2. Steaming.							
3. Guns and Armour.	3. Guns and Armour.	3. Stowage.	3. Stowage.							
4. Steaming.	4. Steaming. 4. Stowage.		4. Light Draught.							
5. Stowage.	5. Sailing.	5. Sailing.	5. Guns and Armour.							
6. Sailing.	6. Handiness.	6. Light Draught.	6. Sailing.							
7. Light Draught.	7. Light Draught.	7. Handiness.	7. Handiness.							

# BALLISTICS OF RIFLED B.L. AND M.L. GUNS.

Gun.	Weight.	Charge.		Projectile.	Bursting Charge,	Muzzle	Muzzle Energy.	Penetration Wrought Iron,	Remarks.	Estimated Penetration, Compound
		Battering	Full.		Common Shell.	Velocity.	Energy.	1,000 Yards.		Armour, at 1,000 Yards.
17" B.L	Tons. 100	lha. 771≟	lbs.	lbs. 2,005	lbs. 78	Feet per Second. 1,831	Feet, Tons. 46,609	Inches 31	Trials at Spezzia, November, 1882.	Inches. 24
15" ,,	63	880	_	1,700	50(3)	2,100	52,000	32.5	)	25
18".5 ,,	63	625	_	1,250	40(?)	2,050	36,415	28.6	See Report of O.C., No. 239.	22
12" ,,	43	288	216	714	(30(1)	1,900	17,904	20.3	Approximate M.V. with & charge,	16
10" ,,	26	300		500	20(1)	2,100	15,285	21.1	1,700 feet per sec. Land service gun. Sec Report of	161
9".2 ,,	18	200	_	320	15(1)	2,100	8,988	17.	O.C., No. 198.	13
8" ,,	12	100	_	180	12	1,970	4,840	12.3		10
6" ,,	Cwt. 80	42		100	61	1,900	2,503	10.1	No. 6" gun now has a 42-lbs. charge, but it is intended that the Mark III. gun shall use it.	8
6" ,,	81	34	17	100	61	1,690	1,980	8.9	Mo Hara 111. Par man and 14	7
5" ,,	34	17	_	50	3(?)	1,750	1,040	_		<u> </u>
4" ,,	22	12	-	25	11	1,738	523	_	The original charge was 14-lbs., which gave a muzzle velocity of 1,930.	_
16" M.L	Tons.	lbs. 450	lbs. 337½	Ibs. 1,700	1bs. 60	Feet per Second. 1,604	Feet, Tons. 30,329	Inches. 23:3		Inches. 18
12".5 ,,	38	210	$157\frac{1}{2}$	820	33	1,575	13,554	17:1	Chambered gun.	13
12".5 ,,	38	160	100	820	33	1,442	11,842	16.1	Unchambered gun.	12
12" ,,	25	85	55	615	38	1,288	7,195	13.3		11
11" ,,	25	85	60	546	30	1,314	6,559	13·4		11
10" ,,	18	70	44	410	21	1,433	5,288	12.2		10
9" ,,	12	50	33	258	133	1,420	3,607	10.2		8
8" ,,	9	35	21	180	15	1,413	2,492	8.3		6
7″ ,,	61	30	17	115	91	1,525	1,854	7.2		5 <del>1</del>
7" ,,	41	22	17	115	91	1,361	1,477	_		_
64-pr. ,,	Cwt. 64	10	8	64	7	1,383	897	_		_
40-pr. B.L	32	5		40	lbs. oz. 2 4	1,180	386	_ '		_
20-pr. ,,	15 } 13 }	lbs. oz. 2 8	_	20	1 2	1,000	149	_		_

## COMPARISON OF THE BALLISTICS AND WEIGHTS OF B.L. GUNS.

Guns.	Weight. Charge.	Projectile.	Muzzle	Muzzle	Penetration, Wrought Iron,	Estimated Penetration,	Bursting Charge,	Weight of Ammunition for — Bounds.		
Guns.	weight.	Charge.		Velocity.	Energy.	at 1,000 Yards.	frmour, at 1,000 Yards.	Common Shell.	100	80
17" B.L	Tons.' 100	1bs. 771 · 6	1bs. 2,005	Feet per sec. 1,851	Feet, Tons. 46,609	Inches. 31	Inches. 24	78	Tons. 121·4	Tons. 97·1
15" ,,	63	880	1,700	2,100	52,000	32.5	25	50	115-1	91.8
18".5 ,,	63	625	1,250	2,050	36,415	28.6	22	40	81.6	65.6

GEORGE ELLIOT.

# ORIGIN AND DEVELOPMENT OF LIGHT INFANTRY.

BY CAPTAIN ROBERT HOLDEN, 4th BATTALION WORCESTERSHIRE REGIMENT.



HE introduction of Light Infantry into the British army, either as regiments or as companies attached to regiments, may be said to date back to the year 1758, but their existence was only temporary; they

were raised for a campaign, and on its termination were abolished. Light companies were first added to infantry regiments as a permanent institution in 1770, but the oldest of the present light infantry regiments was only styled so in 1803.

On the other hand, if we look upon light infantry simply as men armed and equipped in such a manner as to allow them greater freedom of action than the rest of the infantry, or as soldiers employed as skirmishers, they may be said to have existed at the very earliest periods, and to have been a necessity, or, at all events, a valuable addition, to every army.

The armies of Greece consisted of three sorts of infantry; the Hoplitæ, or heavy-armed, the medium-armed or Pelastæ, and the Psili, or light-armed. The latter were employed exclusively as skirmishers, and to cover the advance or retreat of the line.

We read of the Velites, or light troops of the Romans. They covered columns in front and flank when advancing, and protected their rear on a retreat. They were the riflemen of ancient Rome, slinging, shooting arrows, and hurling light javelins with great boldness, and often with terrible effect.

The feudal archers, or light troops, of William the Conqueror, posted themselves wherever wood, hedges, or other natural cover offered protection, and from this point they could direct their arrows with effect. If no cover could be found, they marched boldly into the plain, where they extended themselves as skirmishers do at this day. And there is little doubt that light infantry have been more or less employed in most wars since that period.

Light infantry corps were formed in continental armies some time before their introduction into the British army. The earliest record of their formation in the British army is, I believe, 17th June, 1758, when an order was issued to raise "a regiment of light-armed foot for the service and defence of our provinces in North America; to consist of five companies, of four sergeants, four corporals, one drummer, and 100 men each, besides commissioned officers." The command of this regiment, which was called the 80th, or American light-armed foot, was given to Colonel the Hon. Thomas Gage (second

<sup>1</sup> Captain N. W. Wallace, in his Regimental Chronicle of the 60th Rifles, speaks of the 60th, or Royal American Regiment of Foot, as light infantry in 1757; but he produces no evidence in support of it. Indeed, he almost conclusively proves the opposite by saying that in March, 1759, the first light infantry company of the regiment was formed of picked men from each company. They were certainly not officially styled Light Infantry, though they were so at a much later period, viz., from about 1816 to 1820.

son of the first Viscount Gage) of subsequent note in the American War of Independence. It served in Canada in 1758—1760, and was disbanded in 1764; the uniform having been scarlet with orange facings.

Following close on this was the 90th, or Irish Light Infantry, raised in Ireland in December, 1759, under the command of Colonel Hugh Morgan. It served with credit in the West Indies in 1760—1762, including the expedition to the Havannah, taking part in the successful assault on the Castle of Moro, in the island of Cuba. It was disbanded in March, 1763.

The importance of this branch of the infantry was evidently impressed upon the Government, for in 1759 Colonel James of the 43rd Regiment was directed to select one captain, one lieutenant, one ensign, three sergeants, one drummer, and seventy rank and file to form



AN OFFICER OF THE LIGHT INFANTRY OF THE GUARDS, 1776.

a light company when his regiment joined the expedition under Wolfe. Similar orders were issued to other regiments, and it may be said that every regiment that served in America, or during the Seven Years' War, had a light company; but these companies were generally detached from their regiments, and, like the grenadiers, formed into distinct battalions, and at the peace of 1763 were either reduced or absorbed. The colonels of regiments appear to have selected the most active and intelligent men they could find, and armed them with light muskets, but they were not instructed on any fixed principle of drill to fit them for the service required of them. Sir Ralph Abercromby writing in 1799, says that the British army at the peace of 1763 "possessed no species of men particularly fitted for light infantry," although the other armies of Europe contained many such corps.

We come now to the period which witnessed the establishment of light infantry companies as a permanent institution in the British army. On 25th December, 1770, a royal warrant appeared to the effect that "we have thought fit to add one company of light infantry, consisting of three sergeants, three corporals, two drummers, and sixty-two private men, besides commissioned officers," to the following regiments, seventeen of which were at the time in North America:—

```
1st Foot (2d Batt.) 19th Foot
                                39th Foot
                   20th
 3rd
                                43rd
 4th
                   21st
                                51st
 6th "
                   22nd
                                52nd
 7th
                   23rd
                                56th
 8th
                   25th
                                58th
10th
                   26th
                                59th
11th
                   29 th
                                60th
                                      "(Two Batts.)
12th
                   30th
                                61st
13th
                   31st
                                64th
14th
                   32nd
                                65th
15th
                   33rd
                                66th
16th
                   35th
                                68th
17th
                   36th
18th
                   37th
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On 3rd September, 1771, a similar order was issued with regard to the—

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1st Foot (1st Batt.) 67th Foot 70th Foot 2nd ,, 69th ,,
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But a reduction having, since 1770, been made in the strength of regiments, the companies were to consist, in addition to officers, of two sergeants, three corporals, one drummer, and thirty-eight privates.

On the 24th October, 1771, it was ordered that a light infantry company be added to every militia regiment, but as late as 1782, many of these regiments were without them.

Shortly after the commencement of the War of Independence in America, nearly every regular regiment in the British service possessed a light company permanently added to the establishments, except in the case of the Guards. On 17th February, 1776, a light infantry company was ordered to be formed of detachments from the three regiments of Foot Guards for service in America during the war; but light companies were not regularly added to those regiments till the year 1793.

There are scarcely any documents now extant which throw any light upon the uniform worn by the light companies during the American war. We know that the officers and sergeants carried fuzils with bayonets, and wore shoulder cross-belts, and ammunition pouches; also that the privates were armed with short-hand muskets. And from a correspondence that ensued between the judge-advocate and the war-secretary in 1771, the men would appear to have worn gaiters to the calf only, and to have carried hatchets tied upon the knapsack or suspended from the belt.



OFFICER OF A LIGHT INFANTRY COMPANY, 1799-1800.

In consequence of a report that the Americans were in the habit of picking off our officers, the officers of the light company of the Guards sensibly adopted a very plain uniform, assimilated as far as possible to that of the men. Perhaps other regiments followed their excellent example.

<sup>&</sup>lt;sup>1</sup> For a copy of the warrant I am indebted to Captain Everard, 3rd Batt. Worcestershire Regiment, and late of 29th Regiment.

The conspicuous services of the light companies of the British army during that war made them very popular in the service, and they were looked upon as the principal feature of the army, putting the grenadier companies quite in the shade.

But Dundas, in his Principles of Military Movements, published in 1788, condemns the English system as decidedly inferior to that in vogue in other armies, where whole corps of light infantry were maintained. Those armies, he tells us, understood the real duties required of light troops, but the English, "by their present open order and independent ideas, are under very little control of their officers. Their practice seems founded on a supposition of the spirit and exertion of each individual, more than on the real feeling by which the multitude are actuated. Were our battalions," he continues, "more accustomed to act in line, and with cannon, they would see the impropriety of every instant scattering and throwing forward the light infantry, whose situation must often prevent the proper use of the artillery."

We will pass over the period of the war of 1793-1802, during which the light companies frequently distinguished themselves, because the same system of detaching them from their regiments and forming them into distinct battalions was pursued—a system which was sure in time to lead to the formation of distinct regiments of light infantry.

At the end of the year 1797 a new system of light infantry drill was promulgated by a general order. To give proper effect to this system, orders were issued early in 1798 for the formation of battalions of light infantry, composed of the light companies of line and militia regiments in, amongst others, the southern and eastern districts. The proposal met with great opposition from the commanding officers of militia, for what reason it is difficult to discover. The practice was common enough. In war-time it had invariably been adopted, and was at the very time being carried out, not only by the British army abroad, but by the militia regiments serving in Ireland for the suppression of the rebellion. In time of peace the same practice had often been followed. In 1774 the light companies of the 3rd, 11th, 21st, 29th, 32nd, 36th, and 70th Regiments were formed into a battalion under Major-General Sir William Howe, at Salisbury; and in 1782 the light companies of the 75th, and the East and South Devon, Derbyshire, Middlesex, and Worcestershire Regiments of militia were encamped as a battalion under Colonel the Earl of Cork, on Staddon Heights, near Plymouth.

A long correspondence ensued on the legality of the proceedings between the colonels of the militia, the lord-lieutenants of counties, and the attorney- and solicitor-generals; and early in 1799 the subject was referred by the commander-in-chief to the general officers commanding districts, requesting them to favour him with their views.

The result of the discussion is not known, but the battalions were broken up and not afterwards reformed. Amongst the replies received from general officers was one from Sir Ralph Abercromby, advocating strongly the formation of regiments of light infantry in the army.

Of one thing there is no doubt, and that is that the discussion proved of immense advantage to the army, for the outcome of it was the formation, shortly afterwards, of light infantry regiments.

The oldest of the present light infantry corps dates from 1803. In January of that year the 52nd Oxfordshire Regiment was formed into a corps of light infantry at Shorncliffe, under the superintendence of Sir John Moore, then colonel of the regiment, and the Lieutenant-Colonel, Kenneth D. Mackenzie. To Lieutenant-Colonel Mackenzie is the regiment indebted for that improved system of drill, marching, exercise, discipline, and instruction in light infantry movements adopted by the 52nd on their formation as a light infantry corps, which made them so justly celebrated throughout the service as "a regiment never surpassed in arms since arms were borne by men."



OFFICER OF THE 52ND LIGHT INFANTRY, 1812.

Their system met with such approval that the other light corps were ordered to be formed on the same plan, and the 43rd Monmouthshire Light Infantry, and the 95th

Rifle Regiment, were moved to Shorncliffe Camp to be with the 52nd in 1804-5. The distinguished services of these three regiments throughout the Peninsular War, first as the Light Brigade, and subsequently in conjunction with the 1st and 3rd Battalions of Portuguese Caçadores, as the *Light Division*, are known to every reader of military history.

The following are the periods at which the several light infantry regiments of the British army 1 were made so:—

52nd Regiment (January) 1803. 43rd (July) 1803. 85th 1808. 68th (February) 1809. 71st (March) 1809. 51st (May) 1809. 90th 1815.2 13th 1822. Royal Marines 1855. 32nd Regiment 1858. 105th 1861.3 106th 1861.

At the close of the Peninsular War in 1814 the following regiments of militia had been created light infantry:—Royal Anglesey, Royal Cardigan, Royal Carnarvon, Royal Cornwall, Royal Cornwall and Devon Miners, Glamorgan, South Hants, Huntingdon, Royal Merioneth, Royal Montgomery, Northumberland, Royal Pembroke, Royal Radnor, Rutland, Royal Westmoreland, Kirkcudbright and Wigtown, and Waterford.

There is nothing further to relate of any historical interest. Of course it is well known that the Light Division of Sir George Brown in the Crimea existed in name only. It was so designated to please its commander, but the regiments composing it were neither light infantry nor rifles, nor had they any special duties as light troops to perform.

It only remains, therefore, to add that flank companies of infantry regiments were abolished by general order, dated, Horse Guards, December 24th, 1857, from which period the light companies of the line and militia ceased to exist. And although light infantry battalions are still preserved—and, indeed, were increased on the creation of

territorial regiments in 1881 1—yet their distinctive qualities have, in the opinion of several, almost ceased to exist, for all infantry battalions are now supposed to be thoroughly instructed in movements in extended order, the importance of which in the field has, up to the present time, risen more and more in the estimation of the best judges of military tactics, till now this mode of attack is considered by some to be almost the only one to be employed against the new long-range weapons.



OFFICER OF THE 51ST LIGHT INFANTRY, 1835.

With regard to the illustrations accompanying this article, I would merely observe that the first represents an officer of the light company of the Guards during the War of Independence, and is from a portrait painted in America in 1776; and that the drawing of an officer of the 52nd in 1810, is, I am satisfied after careful inquiry, correct, although it differs materially from that given in Moorsom's history of that regiment.

ROBERT HOLDEN.

<sup>1</sup> On July 1, 1881, the 90th lost its designation of Light Infantry, and became 2nd Battalion Cameronians (Scottish Rifles), but the following became for the first time Light Infantry:—The 46th as 2nd Battalion Duke of Cornwall's Light Infantry, the 53rd as 1st Battalion Shropshire Light Infantry, and the 74th as 2nd Battalion Highland Light Infantry. Twenty-nine militia regiments lost their title of Light Infantry, and nine adopted it for the first time.

 $<sup>\</sup>cdot$  1 In addition to these there were several foreign light infantry corps on the British establishment, viz. :—

The 1st and 2nd Light Infantry Battalions of the British German Legion; 1st (or Duke of York's) Greek Light Infantry; 2nd Greek Light Infantry, and the York Light Infantry Volunteers. Also two regiments of Fencible Light Infantry, the Royal Newfoundland, and the Glengarry. They were all disbanded in 1816.

<sup>&</sup>lt;sup>2</sup> The 90th claim to have been equipped and armed as a light infantry battalion as early as 1794. Assuming this to have been the case, they were certainly not light infantry in 1801; and the designation of "Light Infantry" was not conferred upon the regiment until 1815.

<sup>&</sup>lt;sup>3</sup> The 105th and 106th as Madras and Bombay Light Infantry date as such on the Indian establishment from 1839, but I have considered their rank in the British army as light infantry as the date of their being placed on the British establishment, in 1861.

#### THE SERVICE CLUBS.

#### IV.—THE JUNIOR ARMY AND NAVY CLUB.

HE Junior Army and Navy Club was formed when it was evident that its predecessor, the Naval and Military, was unable to accommodate the large number of officers who desired to join a club without delay. It was started as a proprietary club in May, 1869, and

occupied in succession the houses which are now tenanted by the Orleans, Wanderers, and Isthmian Clubs respectively. The conditions of membership were the same as those adopted by the Army and Navy and Naval and Military Clubs, and a nucleus of officers of standing was soon formed. It appeared to them that there was room for another Service Club, and arrangements were made for the purchase of the property from the proprietor. On the 1st of January, 1877, the Club became the property of its members, and its management was intrusted to a committee, which is chosen from out of the general body. The house property is vested in trustees, and the action of the committee is checked by their being obliged to present a balancesheet and income and expenditure account to the annual general meeting of the Club, which takes place in the Derby week.

The "Senior" and "Junior" Clubs admit officers of militia, but in this Club only officers of the regular forces and those who have retired therefrom are eligible for membership. In other points the rules of the Club differ but little, and the general system of management is the same.

From the rapid influx of candidates a considerable difficulty now arose in finding premises suitable to the requirements of a large military club. Negotiations were made for a piece of land at the corner of St. James's Street and Pall Mall, but fell through owing to the enormous price demanded by the vendors. The building at present possessed by the Club was at last secured for them by Messrs. Lumley, of St. James's Street, who managed with great difficulty to buy out the several sub-lessees who tenanted the premises. The Crown lease fell into the hands of the committee, who had the pleasure of congratulating the Club on having secured an unequalled site and ample accommodation.

A large sum had to be spent in structural alterations, the plans for which were drawn up by Mr. Papworth, a well-known architect, while the work was duly carried out by Messrs. Cole, the builders. Some slight idea of the nature of the work to be done may be gathered from the fact that over 3,000 loads of débris had to be carted away from the premises. A difficulty unexpectedly arose in getting rid of one of the sub-lessees, who persisted in remaining in solitary grandeur in the midst of an army of workmen. A legal decision was at last given in favour of the committee, and the present Club premises were finally opened to members in January, 1882.

The house was originally built for Mr. Crockford by

Sir James Pennethorne, the Crown architect, and by the terms of the lease acquired by the Club the architectural features of the exterior were to be preserved as far as possible while carrying out the structural alterations. The Junior Army and Navy Club is situated in the very centre of club-land, and has a frontage in King Street of 154 feet, and in St. James's Street of fifty feet. The principal entrance is in King Street through a portico of Tuscan columns of Portland stone, over which there is a well-balanced stone entablature, and a verandah running down the whole length of the building.

By permission of the Crown the St. James's Street front has been re-modelled, and a very handsome two-storied bay window thrown out, from which a good view of the whole street and St. James's Palace is obtained.

The hall, vestibule, and corridors on the ground floor are paved with white marble. The large semi-arch at the further end of the handsomely-painted hall first catches the eye of a visitor. The soffit of the arch and the returns are tastefully embellished by floral designs, while the spandrils are filled in with the arms, flags, &c., symbolical of the sister services.

Through the arch is seen the foot of the main staircase, which is entirely of oak and of singularly attractive design. The massive handrail is supported on wreathed balusters, the form and spiral of which were copied from those in an old Elizabethan mansion. The elaborately-carved newels are capped alternately by military and naval crowns.

On the ground floor is the smoking-room, a noble and well-ventilated room, which will bear favourable comparison with those of other Clubs. The room is in the shape of an L, the longer side having three bow windows looking into King Street, while from the bay at the shorter end the whole length of St. James's Street can be scanned. The height of the room is no less than twenty feet; and walls and ceiling have recently been tastefully decorated by Messrs. Crace, the well-known artistic designers. The attention of the lover of art is invariably attracted to the exquisite sculpture of the marble chimney-pieces. The floor is covered with polished parqueterie, but the greater portion of this is hidden by the carpets.

On the opposite side of the main entrance is the library, a lofty, well-proportioned room, which in bygone days has been the scene of many a celebrated chess contest. The points that attract special attention are a somewhat peculiar dado of China matting, and an old-fashioned lofty wood chimney-piece. The latter is of old English oak, with fluted columns, a well-pronounced cornice, and a carved, foliated frieze. The architrave is of Cornish marble, and the fire-place is backed with ornamental tiles.

The entresol is occupied by the lavatory, dressing-rooms, and bath-rooms, which are fitted with all the usual conveniences. The floor is laid with tesselated pavement, and the walls lighted by mirrors running their whole length.

The first floor is appropriated to the morning-room and coffee-room. The former is immediately over, and corresponds in size to, the smoking-room. The windows on the King Street side open out on a balcony, which extends along the whole exterior of this side of the Club. The floor is covered with *parqueteric*, on which lies a heavy-pile carpet made expressly for the room.

relief. Lofty mirrors on black marble chimney-pieces reflect the light from the numerous windows that open out into the balcony. At the east end of the room is the serving-room, connected by a lift with the kitchen, and supplied with arrangements for keeping joints, &c., hot during meal hours.

The billiard-room on the second floor is provided with



THE JUNIOR ARMY AND NAVY CLUB.

Club furniture is notorious for its solidity of make and for a combination of luxury and comfort, but the taste displayed in the designs of the chairs, tables, &c., of this Club is worthy of special remark. The coffee-room on the same floor has a length of eighty-five feet and a width of twenty-four. The walls are painted a dark salmon colour and effectively panelled in white, fret ornament, a combination which a light dado brings into prominent

two tables, and is lighted from the roof. On this floor are the card-room, committee-room, secretary's office, strangers' room, offices, &c. On the third floor is accommodation for about fifty servants.

In the basement are situated the kitchen, servants' offices, cellars, &c., which are fitted with the most modern appliances. It is interesting to note that before structural alterations took place, the site of these most necessary

offices was covered by the massive arches which formed the "caves" of the well-known Paris's wine cellars.

In all Clubs the subject of lighting and ventilation is one of the highest importance. The Junior Army and Navy Club has led the way recently in this point by having been the first to adopt the albo-carbon light, which has proved a great success, and its example is now being followed by other Clubs.

The annual subscription is £8 8s. for home members and £1 1s. for foreign members. The entrance fee is at present twenty guineas, but we are informed it will be increased very shortly. The number of members is at

present over 1,600, and it is not intended that this number should be much exceeded. The other Service Clubs are now full, with the exception of the Military and Royal Naval in Albemarle Street, which necessitates a delay of at least some three years before a candidate can be elected. This Club and the Military and Royal are therefore the only Clubs to which immediate entry can be gained.

Complaints at this Club are the exception, not the rule—due to the vigilance and unceasing labours of the committee, and of the courteous and indefatigable secretary.

JAMES C. DICKINSON,
Retired Staff-Surgeon.

# ANNIVERSARIES OF BRITISH VICTORIES.

# THE NAVAL BATTLE OF COPENHAGEN IN 1801.

In the beginning of 1801 the British Government, having ascertained that an agreement had been entered into between France and Denmark for the transfer of the Danish fleet to the former power, determined, if possible, to prevent this transaction, so detrimental to British interests, from being completed, by capturing or destroying the Danish ships. With this object a large fleet, under Vice-Admiral Sir Club only officers of the Yarmouth and those who have retired therefrom are en probable membership. In other points the rules of the Club divised little, and the general system of management is the said

Messrs. Lumley, o of Sir Hyde Parker, caused a loss of great difficulty tenanted the process of the sound war of the 30th, under an ineffectual fire from nearly a hundred guns, because the Swedes acted as neutrals, and our fleet, by sailing near the Swedish shore, kept out of range of the Danish batteries. The next two nights were passed in sounding and buoying the course for the intended advance, and the days in preparation for the impending battle.

Early in the morning of the 2nd of April a squadron under Lord Nelson, consisting of twelve line-of-battle ships, four frigates, and thirteen smaller vessels, sailed towards Copenhagen. The navigation was intricate and difficult, and the Agamemnon, 64, Bellona, 74, and Russell, 74, successively got aground on a shoal called "the Middle Ground." The other ships got clear, and anchored at about a cable's length from the Danish ships, which were

moored in line, and supported by heavy batteries on shore. A few minutes after ten a terrible cannonade commenced, and was kept up by both sides unflinchingly for three hours. During the action Sir H. Parker made the signal to recall Nelson's squadron, but Nelson, putting the telescope to his blind eye, declared that he couldn't see it! By two o'clock most of the Danish ships had struck; and then Nelson wrote his celebrated letter to the "brave Danes, the brothers of the English," asking them to surrender and stop useless slaughter—that letter which he refused to fasten with a wafer, as his doing so might be taken as an indication of haste. The first man sent for and a taper did not fulfil his errand, for his head was ker off by a cannon shot, but another sailor succeeded.

Leen Danish ships engaged, only three ` rest were taken or destroyed. The Danish nd wounded has not been exactly stated, but the killed alone were estimated at 1,800. On our side, twenty officers and 234 sailors, marines, and soldiers were killed, and forty-eight officers and 641 men were wounded. Of our sixteen ships that had casualties, eleven returned two officers and sixteen soldiers killed, two officers and forty-four soldiers wounded. The other five ships did not show the soldiers separately. The 49th and the company of rifles had a fair share in the loss, if not in the work. The word "Copenhagen" was granted to the 49th and the Rifle Brigade in recognition of the bravery shown by the former regiment and the company of the latter. Nelson, always generous in acknowledging the services of soldiers, says in his despatch, "The Hon. Colonel Stewart did me the favour to be on board the Elephant, and himself, with every officer and soldier under his orders, shared with pleasure the toils and dangers of the day." Colonel Stewart became one of Wellington's best generals in the Peninsula. The gallant Brock closed an honourable career in the action at Queenstown in E. O'CALLAGHAN. Canada in 1812.

#### NAVAL BIOGRAPHY.

#### SIR THOMAS BRASSEY, K.C.B.



HE Brasseys are a very ancient family. Their pedigree appears in full in the Roll of High Sheriffs published by the Society of Armorial Art. This work deduces their origin from John de Bressy of the Norman house of that name, who held lands in

Wilts and Cheshire in the time of William I. The family of de Bressy subsequently settled in Lorraine, where its chiefs were seigneurs of Frétignay and Melancourt.

Sir Thomas Brassey is the eldest son of the late Mr. Thomas Brassey, an eminent engineer and contractor. His name was well known in connection with the firm of Sir Morton Peto, Brassey, and Betts, who constructed the military railway at Balaclava during the Crimean War.

The late Mr. Brassey's popularity throughout Europe may be inferred from the following extract from Lady Brassey's work, Sunshine and Storm in the East, wherein she says: "It is very pleasing, and almost astonishing, even to us who knew his worth so well, to find in what affection, respect and esteem Mr. Brassey's memory is still held in every town, country, and continent we visit, and what kind consideration and attention the name always commands for us."

Sir Thomas, born in 1835, in Staffordshire, was educated at Rugby, whence he proceeded to Oxford and entered at University College. He graduated as B.A. in 1859, and

obtained his degree of Master of Arts 1862. Four years later he was called to the Bar at Lincoln's Inn, having in the interim sat for Devonport, for which place he was returned in 1865 in the Liberal interest. On the accession of Mr. Gladstone's government, 1880, to office, he was appointed a Civil Lord of the Admiralty and made a K.C.B. This post he held from April in the above year to November, 1884, since which period he has been secretary to the Admiralty, and, politics apart, all must allow that Sir Thomas Brassey is eminently fitted for his appointment. It has ever been his sincere desire, for years past, to ascertain the truth about our seamen, and to devise the best way of increasing their efficiency, improving their material and social condition, and elevating their character, and in him all in the bluejacket service have a staunch and true friend. Sir Thomas Brassey has passed the examination and obtained the certificate of a Master Mariner.

In February, 1876, Sir Thomas Brassey read an important paper in the theatre of the Royal United Service Institution on "How best to Improve and Keep up the Seamen of the Country." He began with an analysis of the causes of the alleged deterioration of British seamen, and concluded with an enumeration of the remedial measures proposed. They were:—

- 1. The abolition of advance notes.
- 2. The shipowners to be required to allow interest in case of unnecessary delay in paying off their crews.
- 3. The government to give a bonus to shipowners for apprentices trained under suitable conditions and under engagement to serve a year in the navy, and afterwards to join the reserve.
- 4. Training-ships under the Admiralty to be established at the commercial ports according to the plan of the Manning Commission.
- 5. A compulsory self-supporting seamen's pension fund to be established under the management of the Board of Trade and the guarantee of the State.
- 6. Voluntary examinations in modern languages and commercial subjects to be established for masters and mates; studentships for the officers of the merchant service to be founded at Greenwich.
- 7. A scale of provisions to be prepared by the Board of Trade, and the ships bound on long ocean voyages to be required to be provided accordingly.

The reading of this paper was followed by a lengthened discussion, in which Messrs. Shaw Lefevre and Donald Currie took part, as well as Captain Sir George Biddlecombe, R.N., Lord Waveney, and Lord Eslington, M.P.; and

so great was the interest evoked that Sir Thomas Brassey's lecture obtained the somewhat unusual honour of an adjourned discussion, when the subject was further debated by Mr. Corry, M.P., Captain J. C. Wilson, R.N., and Mr. John Williamson, Honorary Secretary to the Liverpool Committee for Inquiring into the Condition of Seamen. A full report of this remarkable paper is to be found in the Journal of the Royal United Service Institution for 1876.

It is difficult to deal with Sir Thomas Brassey in view of the high and responsible official position he holds, and yet avoid controversial matters. The efficiency and inefficiency of the British Navy is the topic of the day, and it would be insane to suppose that Sir Thomas Brassey is unable to grasp the subject in all its bearings. Reduced to its simplest terms it is a question of money, and no officials can override the Chancellor of the Exchequer, who allots so much to each spending department. When the navy and the security of the country are concerned Liberal members may perhaps see reason to vary their favourite course of disapproving of the Government action, by supporting ministers lest the thing they wish to get done should be put to the credit of the other side. The naval policy of the Government has been the policy of the Admiralty this many a day. It has been described as a policy which consists in doing as little as possible, and doing this little late; in spending a great deal of money in the name of economy, and of talking much and long. Sir Thomas Brassey confessed, no longer ago than last autumn, and in a most public and exemplary manner, that he was in the position of Prince George of Denmark. His heart was with the party he was compelled by pressure of circumstances to vote against, but it cannot be supposed that if the nation be determined to open its purse strings and put our first line of defences beyond suspicion of inadequacy to the work required that there would be any hanging back on the secretary to the Admiralty's part to give effect to the national wish.

In 1860 Sir Thomas Brassey married Annie, only daughter of John Allnutt, Esq., and it is impossible to dissociate Lady Brassey's name from any biographical sketch, however short, of her husband. Lady Brassey has made a great literary reputation by her books of travel, and the voyages of the Sunbeam are familiar to the reading world, who all admire her grace of style and vivid powers of description.

The Sunbeam was designed by Mr. St. Clare Byrne of Liverpool, and as first launched may be technically defined as a composite three-masted screw schooner. Topsail yards were added to her foremast, and several other slight

alterations made for her voyage round the world. The engines, by Messrs. Laird, are of seventy nominal, or 350 indicated horse-power, and developed a speed of 10·13 knots on the measured mile. Her bunkers contain eighty tons of coal. The average consumption is four tons, and the speed ten knots in fine weather under steam. Under sail she has done fifteen, frequently twelve, and for many days together, on a long voyage, kept up an average of nine.

To those well-known works, A Voyage in the Sunbeam, and Sunshine and Storm in the East, Lady Brassey has lately added a companion volume, In the Trades, the Tropics. and the Roaring Forties, which is not less interesting than its predecessors. In 1873 Sir Thomas passed the voluntary examination established by the Board of Trade for yacht owners desirous of qualifying as masters. He is an expert seaman, and handles his favourite yacht with as much skill as many an officer in the navy. Sir Thomas Brassey is Honorary Commander of the Liverpool Brigade of Royal Naval Artillery Volunteers, in which he takes considerable interest. The value of this branch of our volunteer army has been somewhat overlooked, but due recognition of it will shortly be made, as Sir Thomas Brassey proposes that a conference shall be held between the Admiralty and the War Office authorities with a view to determine what duties shall be assigned to the Naval Volunteers in the defence of our coast and mercantile ports.

Sir Thomas Brassey, who represents Hastings in Parliament, is a D.L. of Sussex and J.P. for East Sussex. He is younger brother of the Trinity House and Associate of the Institution of Civil Engineers. He was president of the Statistical Society 1879-1880, and is a governor of University College. He is a member of the Royal Commission on unseaworthy ships and colonial defences, and the author of Work and Wages and Foreign Work and British Wages. In 1883 Sir Thomas Brassey completed the fifth volume of his exhaustive work on The British Navy: Its Strength, Resources, and Administration, to which he thus alludes in the introduction:—

"Amid the various and unceasing calls of public and private duty the compilation of this work has been an arduous task, in which I should scarcely have persevered had I not been encouraged in its prosecution by many memories of pleasant cruises around the coast of England and in more distant waters. In a spirit of gratitude for pleasures so keenly enjoyed, it is the highest ambition of my life to co-operate with men of greater influence and authority in promoting the welfare of the seafaring classes."

A. L'ESTRANGE.

#### SHOT AND SHELL.

#### BY MRS. POWER O'DONOGHUE.

Authoress of "Ladics on Horseback," "Unfairly Won," "A Beggar on Horseback," etc. etc.

#### CHAPTER V.

OW are we going to Willesden?" asked Shell next morning, as they rose from a late breakfast. "Shall we drive, or go by rail?"

"I am not very sure about taking you with me at all, sister mine," an-

swered Netherby, going to the window and glancing out. "It looks like rain, and I don't suppose you'd care very much about it. I shall stroll down to Piccadilly, and young Bryce will drive me over in his buggy. If there is anything good I shall be certain to get it."

"Provided it is not too dear," Shell put in, half archly, yet with an undercurrent of real seriousness in her tone. "We must keep within bounds, Shot darling, or there will be trouble for both of us."

"You are always preaching economy, and it grows rather tiresome at times," said Netherby, turning impatiently from the window, and affecting not to see that his winsome sister was forming her mobile little mouth into a rosebud, as though wanting to be kissed. "On my soul it's too

bad, we're not quite at the crash yet, and as for the horses—why, Bryce said he'd wait. Oh, yes; kisses are all very nice"—and from the way he smiled he evidently thought them so—"but you mustn't torment a fellow every minute in the day about a paltry pound or two. There, that will do—till the next time you're naughty. Now what do you say about coming? I'll take you if you like, provided you don't so much as open your lips on the subject of L. S. D."

"I don't think I am particularly anxious about going," returned Shell cheerily. "It does look a little dark, and

I dislike long drives—and besides, you know, Reginald is coming."

"Which last should be first: in other words, it weighs the other scale right down," said Netherby, gravely lighting a cigar. "Yes, you had decidedly better remain at home," and humming a popular tune he put on his gloves, adjusted his tie at the looking-glass, kissed his sister, and strolled leisurely out.

It was a grey, sluggish day, more like winter than spring—and before Shot had gone a dozen yards he turned back to fetch his overcoat from the hall. As he closed the door for the second time, a young man, wearing a long brown

garment extensively trimmed with fur, and a very superfine headpiece, came up the steps and accosted him.

"Netherby of Zale, I believe?" said the young man, who wore waxed moustaches, and spoke with a twang.

"Yes," said Shot bluntly—feeling that he had not any reason to be ashamed of his name or patrimony.

"Glad to see you, then — very!" exclaimed the other heartily. "If you'll believe me, I was just going to call. My name's Bloxham—Bob Bloxham! Bibury Bob



"YES, YOU HAD DECIDEDLY BETTER REMAIN AT HOME."

the chaps call me, 'cos I seen a lot o' doings there during Delaware's time. You're going this way—St. James's Street?—so am I. You're well, sir, I hope?"

"Very well, thank you," answered Netherby, glancing a trifle sharply at his intended visitor, and noting both honesty and good nature in his homely-featured face; "I hope you are the same. May I ask to what happy circumstance I am to attribute the honour of making your acquaintance?"

"Honour, don't call it, sir, please! that's all the other way, I can assure you," returned Bloxham, lifting his

wonderful hat with a lavender-gloved hand. "The truth is, my father and yours were old friends—very old—often heard, scores of times, of Netherby (Colonel Netherby) of Zale; and proud I am to know his son this day. I thought it must be the same when that chop-house chap told me your name and country last evening, and, by Jove, I managed to find out where you were stopping, and out I come to call on you first thing this morning. I'd have left my card if you'd not been in, you know. I'm at Claridge's; you've heard of the place?—yes?—of course. Fine day this, for April. I mean dark—uncommon dark."

"Very," acquiesced Netherby, smiling quietly, and not at all averse to the fun which Mr. Bloxham's peculiarities seemed likely to afford. "May I ask, was your father a county man? Was his residence close to Zale?"

"Well-no; he wasn't exatly that," confessed Bob, reddening a little; "but close to Zale he lived; very close, oh, yes!'

"Bloxham?" repeated Shot, mischievously, and enjoying the embarrassment he was creating, "I don't recollect the name. An army man, perhaps?"

"Well-no; he wasn't an army man either;-not an officer, at least. Indeed, he'd left the service before I was born," blundered poor Bob, looking extremely red and ridiculous; "but he was often at Zale, and told me lots about it too."

"Dear me! who could he have been?" said Netherby, smiling and musing. "Somebody before my time of course. Not a county man, nor yet a soldier—and living close to our place at home."

"Oh, I didn't say he wasn't a soldier," interrupted Bob, "but he wasn't one when he was at Zale. Oh, no! he was an-an-an inspector, I think I may call it."

"Oh, I see! a constabulary man?" said Shot, with an air of tremendous enlightenment; "that was it, was it? Well, Mr. Bloxham, I am going on to Bryce's to see some horses at his new farm,—I'm trying whether I can't pick up a hunter or two cheap, close of the season. Should you care to come along with me as far as the first part of my journey?"

"Delighted!" said Bob, heartily; "I know Bryce well, and he knows me too, so if a deal comes off we'll dine together somewhere—you, and me, and Bryce—and I'll stand the screw," he added, facetiously; "tin's nothing to me: I've lots. Was that your sister who was with you last evening?—or was it a sweetheart? An uncommon well-groomed young lady, whoever she was."

"The lady you allude to is my sister," replied Netherby, with cold formality, and looking a little dark.

"Deuced fine girl then, hope you'll introduce me," said Bob, giving his hat an extra cock, and swaggering vulgarly; "good knee action, and splendidly ribbed up."

"If you wish the preserve terms with me, you must leave ladies' names out of our discourse," answered Netherby, frigidly; "we can find other topics in abundance." And quickening his pace he said very little more until they arrived at Bryce's neatly sanded yard, where the popular dealer was soon in attendance, bowing politely to the master of Zale, and shaking hands with Bloxham, whom he seemed to know very well.

"I am pretty punctual this morning," observed Shot, glancing upward at the clock underneath the balcony. "Anything new here since yesterday? You said something might come in."

"Yes, sir; but we really can never tell," returned the dealer. "We ought to have a number of hunters coming in for sale just now, but the season is so backward, it's quite winter yet, and they're holding a succession of windup days everywhere; unwilling, I suppose, to give up sport. You ought to be at Six Hills on Monday. It's the last day, and I can give you something good to ride."

"Thanks, I meant to ask you—or to buy something that would do to take there for a trial. Some men I know are going out that day, and I said I'd join them."

"Gad, we'll all go! we'll make up a party!" cried little Bloxham, excitedly; "you shall mount me too, Bryce; and, gad, we'll be as jolly as sandboys if we don't break our necks!"

"I shall certainly give you a chance of doing so!" said Bryce, smiling; "we've got some mre hot-blooded ones just now. I'm sure I can suit you quite well, Mr. Netherby,-but all our best horses are at the farm; so, if you are ready, sir, we'll start. The trap is at the door."

"Oh, you needn't be sayin' 'sir' to him!" cried Bob, getting almost on tip-toe in order to slap Bryce jocosely on the back; "the devil a bit! He's one o' the good old stock,—Netherby of Zale; and he knows he's a gentleman without being reminded of it."

Mr. Bloxham laughed and chuckled at his own speech, and young Bryce-who, indeed, looked gentleman enough himself to ignore saying "sir" except to royalty-flushed a little, and smiled, as they strolled towards the entrance.

"Never mind, Bertie my boy!" said Bob, rallying him; "you and me has been friends a good long while, and we understand one another, don't we? And how's old Joe?" -referring to the former well-known proprietor of the establishment—"good old Joe Anderson. God bless me! he must be eighty if he's a day! Didn't my grandfather know him and John Scott (honest John they called him) as intimate as if they were brothers? Ay, faix! but old Joe, though he's deaf, has his eyes yet for a book, or a stepper, or for a pretty woman, I'll be bound! Ha, ha!" and again hilarious at his own weak wit, the facetious Bob called up a hansom, while Netherby and Bryce took possession of the neatly-appointed buggy which was in readiness for the start.

"Gad, I'll go too," he cried, with an air as though he thought his companionship would otherwise be greatly missed. "Blest if I don't get there before you! Go ahead, jarvey! A sov. and a liquor if you beat the dealer's hoss, so fire away!"

Off they drove, by Park Lane, across Oxford Street,

Bryanston Square, and into Seymour Place, where the vehicles rattled and clattered over the pavements, and the children shrieked and yelled as they darted under the horse's noses with that recklessness which seems inseparable from the Arab state. All the way along Grove Road the harsh-fed grey attached to the hansom kept on pretty even terms with the dashing bay which Bryce was holding so well in hand, but by the time Kilburn was reached the cab-horse had fallen a little to the rear. He pulled up pace again, however, in Willesden Lane, but when the Chapel was passed Bryce put on a spurt and

winner. Then appeared St. Patrick, a very perfect fencer, by Garnet, dam by Old Arthur; Witchcraft, a black mare, on which Netherby longed to see Shell mounted, and immediately took note of for her use; Nigger, a fine black by Gunboat; Sober Boy, a capital brown, by Peelseeker out of Blue Ruin; Miss Davis, winner of the Hunters' Steeplechase at Edenbridge; Pathfinder, Trusty, Countess, and lastly Popgun, a superb bay, with low firm hocks good fores, and a beautiful lean head remarkably well set.

He was the best of all the good ones they had seen out, and while Bryce was perfectly silent, allowing his



AT BRYCE'S.

headed the grey considerably, keeping the lead to the "White Hart" pleasure-grounds, where he turned short to the left, and drove through the farm gates in advance of the cabby, who seemed in no way disconcerted, but claimed the money and the liquor all the same—and got them too—"for having done his level best."

A magnificent lot of hunters were those which they inspected at the perfectly-appointed stables at Church Farm. Thunderbolt was the first led out: a chestnut horse, Irish-bred, up to sixteen stone. Black Knight, by Outcast, came next, a superior weight-carrier and prize-

merits to speak for themselves in the critical eyes of the buyer, Bloxham was loud in his praises.

"That's the ticket for you, Netherby," he said, stooping to examine the bay's fetlocks with the air of a supreme judge, yet jumping nervously on one side when the animal lifted a hoof. "He's dirt cheap at the price! Have a mount on him over the hurdles. He leaps splendid!"

"Suppose you try a little exercise in that way yourself," said Shot, mischievously. "Good practice for Monday, you know, and would enable me to judge fairly of his action and the way he plants his feet."

"Well, I've no objection," said Bob, with a swagger; "only you see, I haven't got any spurs on, and I never ride a horse at his fences without spurs. The beggars gammon one so!"

"Well, but the same applies to me," said Netherby laughing; "I am spurless also, and am quite as easily gammoned as you."

"Not a bit of it!" cried Bob; "you've got fine long legs to stick on by if the divils kick! so get up and go ahead!" and with an added word of instigation from Bryce, the bay was saddled and Shot got up.

Over the various leaps—bare hurdles, gorse hurdles, and made fences—the master of Zale rode his intended purchase; and as *Popgun's* style and manners were equally good, and his schooling of the most satisfactory character, his price was soon adjusted, and he was led in as bought.

A trial of the black mare being promised Shell, the three gentlemen partook of refreshment and cigars and returned to town in the same order as before, although at a less rattling pace, despite the chilly nature of the atmosphere. In the evening they all dined together in dashing fashion, and Bob told astounding stories of his Bibury experiences, and ate meringues glaces until the exhausted waiter declared that there were no more to be had.

#### CHAPTER VI.

ELEVEN o'clock on Monday morning hounds were at Six Hills, to wind up a season prolonged beyond the memory of that oft-quoted individual—"the oldest inhabitant"—and a biggish field assembled to enjoy the sport.

The previous day had been an extremely wild and wet one, and the wind was then blowing fresh and strong, with threatening clouds lowering overhead.

There was a fine contingent of real sporting men out, together, of course, with the mixed company that always assembles when last-day fixtures are come-at-able by road or rail from town.

The Netherbys were among the cheery crowd who watched the unboxing of their horses at the little unpretentious railway-station, and rode on in good time to the meet, Shot evidently well pleased with the appearance of his new purchase, Shell most perfectly turned out on one of Eyre's best hunters, Reginald himself by her side on a hard-as-nails grey, Bertie Bryce on *Thunderbolt*, and a host of others, including Mr. Bob Bloxham, who was dressed with extraordinary splendour in unsmirched pink, with a brand new hat, superior tops, snowy leathers, and a hunting-crop of enormous dimensions carried ostentatiously in his hand.

Just as the master drove up the clouds began to roll away, and the sun—for long a stranger—showed a pleasant

face, so pleasant, indeed, that he had fairly begun to shine when the order to move was given, and the countenances of most of those present at once followed suit.

An enjoyable trot soon brought the cavalcade to Aylmer's Gorse, generally a sure find, and the scene of some rousing gallops during the cub-hunting season.

"Shall we have a spurt from here, Tom?" inquired little Bloxham, trotting up to the huntsman as he was busy putting in the hounds, and beginning to look somewhat blue about the gills.

"Certainly, sir," was the reply, "but please don't press on the pack;" and Bob jogged back to Netherby's side, to stare again at Shell, to whom he had been introduced by her brother, somewhat unwillingly, it must be confessed, on Shot's part—and to announce that they were "sure of a gallop"—a certainty which, to judge by his rueful looks, did not appear to afford him any very special satisfaction.

A moment and a seasoned hound opened out—a cheer from the huntsman proclaiming that it might be depended on—and in another instant a chorus of delicious music broke the stillness, and the "Tally ho!" which sends the heart of every true sportsman first into his throat, and then—hard as a millstone—down again into its right place, sounded out upon the keen air.

"Easy, gentlemen! Quiet, quiet! Hold hard, please, till the hounds have got away; they're not out of cover yet!"—the master's eager tones were heard imploring, as he dealt out warnings to the impatient field, while the stirring notes of the pack incited the horses almost to madness, and one of the whips, galloping by, seemed, as he rose in his stirrups and looked ahead, to intimate that the game had broken from the far side of the covert.

"Oh, dear!" said Bob, shaking very much in his tops, 'I don't feel well; I really don't! I think I'll have to pull off very soon. It's them confounded glassy things they kept bringin' us on Saturday night. I knew I'd be sick! I'll go back, I think, if you won't tell your sister."

But Netherby only laughed at the pale face, and bade him cheer up, as the excited field went charging down the ride on the village side of the covert—the hounds hunting beautifully, and speaking most cheerily as they followed up the line.

"Where's the fox gone, I wonder?" said little Bloxham, plucking up a show of courage and cantering along by Shell's side, to the manifest annoyance of Reginald Eyre, who was to act as her pilot throughout the fortunes of the day. "Good fun if they can make nothing of him, and we have to go on somewhere else to look for another, and maybe not find one at all, and so spend most of the day on the road. I've known it to be so—often."

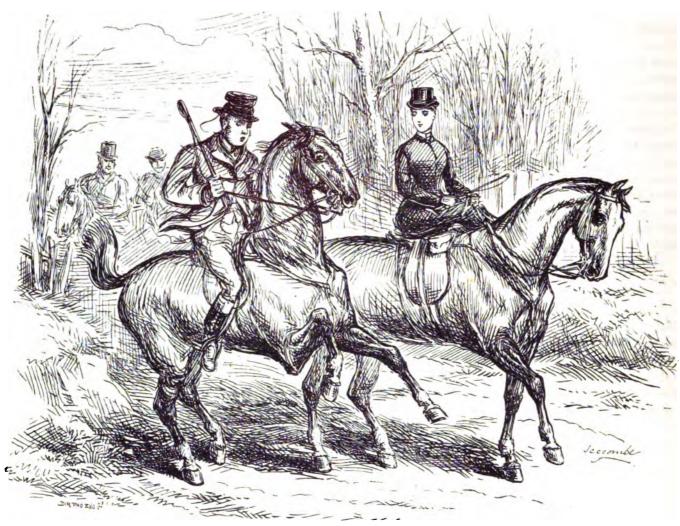
"That would be but poor sport indeed," said Miss Netherby, smiling at her accepted escort, and widening the distance between her enforced one and herself. "They say there is always a run from here, and pardon me for telling you that if you ride so hard on the curb you will never get safely over the fence on the left, to which the pack is bending."

"Oh! oh! good laws! Glory be to goodness! have we a lep so soon?" cried poor little Bloxham, in accents of such undisguised terror that Shell and her lover laughed aloud, and Netherby and Bryce, galloping in front of them, glanced back for a second and laughed in company.

The "lep" was an ugly one, and the girl's heart beat high as she watched the prowess of her brother's perfectly trained mount, and his beautifully easy seat in the saddle. animal held by a wrecker, while another of the useful fraternity assisted the crest-fallen and mud-stained hero to regain his seat in the saddle.

"We shall not see very much of your friend, I fancy," said Reginald, smiling archly at Shell. "He is evidently not an adept at cross-country riding, and this fox is making for Atherley Gorse."

He was right. Reynard's fated mask was pointed in the direction specified, but after a short though stiff run—during which grief was conspicuous and abundant—he took



"YOU SEE, I'M NOT SO FAR BEHIND THE OTHERS, AFTER ALL."

For herself she felt no fear. Carried by one of the cleverest horses in the county where he was bred, and piloted by the most skilled horseman, she felt as safe and as comfortable as though seated in her rocking-chair in the snuggery at Zale.

"Oh, glory! I'm done for now entirely!" groaned the hapless Bob, as his fretted and ill-ridden horse bungled at the fence, and falling upon his head sent his rider six yards into the field of plough, which was the first they had to traverse, and Miss Netherby, glancing back as she took her mount at a judicious pace along the headland, saw the

shelter in the covert, about which the hounds unmercifully rattled him, striving to make him break,—but too fainthearted, or perhaps too full, for another burst, he lay down under the thick gorse, and was quickly run into and disposed of.

"You see I am not so far behind the others, after all," said little Bloxham, appearing with some stragglers upon the scene, and trotting boldly up to Shell's side, with a perceptible perfume of strengthening mixture hanging about him, and a look as though he were striving to appear heroic, in his dinted hat and mud-stained gar-

ments. "I've had my share of the fortunes of war, Miss Netherby, as all straight-going men must have now and again. This is a fine country to hunt over—deuced fine—and fences fair. Where do we go next, I wonder?"

"I think Pine Wood is the nearest draw, or Thirlemere; but I have got a hint that we are going on to Stoneleigh. The other coverts are generally blank."

"Oh, dear! but why can't we try them?" said Bob, faintheartedly. "It seems waste of time not; doesn't it,—in case there might be a fox, you know?"

"Thrush Hill is the next order," said Shot, riding rapidly up. "They have news of a 'varmint' hanging about there, and it's not far off; only two miles of a trot."

"I suppose it will be a sure find?" said little Bloxham, still sticking close to Shell, who seemed amused with him, and evidently in most unsportsmanlike terror of a run. "Do you think it will, Miss Netherby?"

"I certainly hope so," was the reply, "for we have done nothing yet—or very little—and to-day is our last chance for a good long while to come."

"I fear, if there is a fox, I must keep to the road," said Bob, meditatively. "I don't feel well enough for a strong gallop, and this beast doesn't know how to lep a potatoridge! confound him!—though Bryce gave him such a flourishing character."

"Poor thing! he has scarcely had fair play," observed Shell, glancing compassionately at Bob's worried and unquiet mount. "He is not properly bitted, and the throat-latch is too tight. It is evident Mr. Bryce did not glance him over before leaving the station. He thought his groom was competent, or that you would see to such matters yourself. I never get into the saddle without running my eye over headpiece, girths, shoes, everything, and making certain that there is nothing to fret or worry my mount."

"Glory! how could I be bothered?" said Bob, shrugging his rather well-shaped shoulders, with a gesture expressive of impatience and dissent. "I've always enough to do to see that there's nothing to fret or worry myself! This is a bad-tempered devil at all events—keeps his neck like iron, and kicks out like the deuce."

"That is because you don't give him head-room, and are irritating him with your spurs," explained Shell. "Don't hold him so tight, he can't actually see where to put his feet. Indeed I greatly fear you will come to grief."

Not half relishing this discouraging prognostication, and perceiving moreover that Miss Netherby was disinclined for further parley, the redoubtable Bob dropped back a pace or two, and took a quiet pull at his flask by way of getting up his courage.

"I say," he cried, joining Shot, as that bold young sportsman cantered by with Bryce alongside of him, "that sister of yours is a rum one! She snubs a fellow most demnibly! What's it all for, eh?"

"I'm sure I don't know," said Netherby, laughing, "She doesn't mean it, or wants perhaps to be left alone. If she has offended you, stop with me, and don't go near her any more. Leave her to her pilot."

"Faith, I believe I will," said Bob, candidly. "I'm more at home like with you and Bryce; so I'll make up my mind to stick to the pair o' you from this out."

And so he did, as far as the covert-side, but not much farther, for a fox was away at once from Thrush Hill, and no two men out were swifter or straighter after it than Shot Netherby and Bertie Bryce.

Over a terribly stiff line of country the game led the tailing field—many of whom, however, were at first well up, for the grass lands were in capital going condition, and there was not much holding country to be crossed in the beginning. Running a burning scent, and giving tongue most inspiritingly, the gallant pack raced their quarry to Dashington, where he took refuge for a brief spell in the gorse covert, but disdaining to dwell, again faced the open, and pointed straight for Abbey Woods plantation,—horses being by this time pretty well "baked" while many an empty saddle and riderless steed marked the disastrous course of events.

Shell had pulled off at the Red House, having had the misfortune to lose a fore shoe when crossing the brook at Hinkley Wold, and Shot, missing her from among the first flight as they crossed the little common, looked anxiously back when getting over the succeeding field of plough. His sister was not to be seen—neither was her pilot—but somebody else was: poor little Bloxham, almost astride his horse's neck, holding grimly on by mane and bridle, with a very white face, and a volley of unparliamentary language issuing from his widely parted lips.

"Hold hard!" he shouted, as his flecked and foaming steed dashed by over the trying and uneven ground. evidently maddened from ill-usage, and going all abroad,— "Stop, the whole of ye! or I'll never pull up. This devil is running away wid me!"

And truly it seemed to be the case; but the dull heavy tug on the animal's mouth was only increasing the mischief, for Bob Bloxham had not learned that the way to stop a runaway is certainly *not* by giving support to his head.

There was no time, however, for observation—much less for either argument or counsel: steed and rider dashed so swiftly by.

Right ahead—facing them—was a low, ragged, black-thorn hedge, the top of which leaned away from the field, indicating a wide gripe on the off or landing side. Sportsmen know—many of them, at least—that when thorns grow straight there may be a ditch beyond them, but when they slope away there is a certainty of something ugly to negotiate. It was a terrible fence, the "beggarly blackthorn," the dread and terror of many a straight-going rider in that country of indomitable hearts—and through

the gate to the right, leading out upon the Hanwell old coach road, many a red coat was seen wisely turning.

Poor little Bloxham! First at the ghastly obstacle, and riding at it with what the uninitiated mistook for a rare show of pluck and courage, his place in the run (though foremost then) was soon to be altogether lost. excited animal he was riding, uneased and unguided, was seen striving in vain to shake his head loose, that he might stretch his neck and make his effort. Rushing wildly at the fence, fighting and fought against, he took off quite six feet too soon, and disappearing over the blackthorn was lost to the view of those coming on from behind.

"My God!" exclaimed Netherby, rising high in his

walking a yard or two along the edge of the gripe, he looked down into it, and beheld the panting side and blood-stained nostril of the fallen horse, while half hidden beneath the straggling mane, a white, set face was partially

They knotted their reins together, Netherby and Bryce —for the latter had succeeded in getting round by another way—and with difficulty descending partially into the chasm, they passed the extemporised rope beneath the armpits of the fallen man, and dragged him to the bank. On the grass they laid him down, and Netherby supported his hanging head, while Bryce undid the things about his neck, and opened his vest to give him air.



LITTLE BLOXHAM'S PERIL.

stirrups that he might see into the field beyond—"he must be down, and hurt too, for there's no sign of man or horse ahead of us!"

Taking in the situation at one lightning glance, he looked hurriedly at the fence, and urging his horse back a perch or two from it, put in the spurs, and went at it with grinding teeth. The hedge in itself was not much, but beyond it lay a black and yawning gulf, into which Popgun—clever as he was, and superbly ridden dropped his hind legs as he landed. In an instant Shot was off his back, standing safe on level ground, and keeping a strong hold of the bridle, he assisted the animal by voice and rein to regain a place of safety. Then,

Very reverently the work was accomplished—and the two men laid aside their hats, and uttered no word, for they believed they were in the presence of the dead.

Gradually the sealed eyelids unclosed, and fixing the orbs which they had covered upon the sympathetic face that bent immediately above him, the injured man laid his arm very feebly around Shot's strong shoulder, and murmured— "Netherby, old fellow, I'm glad it's you; I am indeed. Thank God for it!" Then, as a yellow effulgence passed over his face, he whispered almost inaudibly-so low that Shot had to bend his ear quite close to hear it—"Take me to Zale!"

(To be continued.)

#### EDITORIAL.

#### OUR GUN ARMAMENT.

Owing to the onerous nature of my editorial work in connection with the present issue, I have been quite unable to find time to continue my observations on "Our Gun Armament." I will proceed with this subject in my next. Apropos of the recent lecture at the Royal United Service Institution on the subject of the manufacture of heavy ordnance by Mr. W. Anderson, I was not aware that such a lecture was about to be delivered. If I had been, and had known the day and hour of its delivery, I would have managed to have been present. I would have done myself the honour of speaking my full measure of ten minutes' time, and I think I would have greatly surprised the lecturer and the audience by a few remarks of a nature the like of which they would not previously have had any idea of.

#### AMATEUR PHOTOGRAPHY.

AMATEUR Photography having of late years become so fashionable an amusement, it may interest such of my readers as dabble in the art, to know that an Exhibition is being organised by the London Stereoscopic Company, in which photographs taken by bona fide amateurs only are eligible. Prizes to the value of upwards of £200 will be awarded, consisting of gold, silver, and bronze medals. There will be in all some thirteen different classes, and cyclists are offered, as an inducement to send in specimens of their work, a prize of a tricycle of the best manufacture, given by the Coventry Machinists' Company. The Exhibition will open on April 23rd, and close on May 9th; but pictures will not be received later than April 14th, at 103, New Bond Street.

#### INTERNATIONAL INVENTIONS EXHIBITION.

It is my intention to publish a series of papers with illustrations of all the more important inventions in Division 1. The following are the groups I have selected: Group vii., naval architecture; group viii., æronautics; and group xxv., fire-arms, military weapons, equipment, and explosives, together with certain classes that have a direct bearing on the army and navy. As these papers are intended to be brought out in as complete a manner as is possible, the Editor hopes inventors will supply him with matter and blocks as soon as possible. The general arrangement of these important papers, I have placed in the hands of my friend Staff-Surgeon Dickinson, who will be at South Kensington every Monday from 11 till 12, and I shall be happy to see exhibitors at my office every Thursday from 3 to 5 P.M. The very courteous reception Mr. Dickinson met with from the authorities of the Exhibition, leads me to believe that our joint labours will be considerably lightened thereby.

#### VUITTON'S MILITARY BED.

This is a very ingenious contrivance. The bed with its bedding is contained in a camel trunk, two of which could easily be carried by one camel. They are made in two sizes, twenty-nine inches and thirty-two inches broad, and

the beds are six feet four inches long. The simplicity of the bed is such that it can be unpacked and put up, or the reverse, in three minutes. The bedding consists of a hair mattrass, pair of blankets, and two pairs of sheets, and there are poles which can be easily fixed to support a frame for mosquito curtains. The excellence of workmanship and strength of these beds and trunks may be inferred from the fact that M. de Lesseps has had a similar bedtrunk in use for the last nineteen years, which was manufactured by M. Vuitton, père. The suitability of these military beds for the Egyptian campaign goes without saying, and we should advise other officers, special correspondents, to go and judge for themselves. M. Vuitton has also for some years past manufactured a spécialité—wooden trunks—which from their peculiar construction are much stronger than those made of leather or any other material.

#### CROSSING THE LINE.

WITH an article entitled "Crossing the Line," in my last month's issue, there were some drawings which were reproduced by an artist on the staff of this Magazine, and who signed his name to them. The officer of the Royal Navy who produced the originals from which the artist worked has taken exception to the name of the latter being affixed to the illustrations, on the ground that he did not produce the original drawings.

The fact was, that the originals were, in my opinion, of much too amateur a character for this Magazine, and as I am responsible, as Editor, for the class of drawings inserted in this journal, I decided to have them reproduced artistically. I must admit, however, that through my hurrying on the process-work connected with them, I omitted to observe that the artist had put his name to the drawings. I hasten to say that the naval officer who supplied the originals is fully entitled to have his ideas recognised on the question of originality. I must further say that this officer's fancy in the production of the comic sketches sent to me is of a very superior order. I will even go so far as to observe that if he carefully studied the artistic method of producing pen and ink drawings for process or other reproduction, he would soon make a name as an artist of excellent capacity. He would find it well worth his while to turn out work of so artistic a character that there would be no necessity to recopy it for the purposes of this or any other illustrated periodical.

#### LANCASTER'S FOUR-BARREL REVOLVERS.

LORD CHARLES BERESFORD, has, I have been informed, telegraphed to Mr. Charles Lancaster, for an immediate supply of one of his patent four-barrel breech-loading revolvers. His lordship is an undoubted judge of a good service revolver, and has doubtless practised with one of the many pistols of this pattern which have been supplied by Mr. Lancaster to officers of both the army and navy now on service in the Soudan. They are constructed to take the calibre 476 latest pattern regulation ammunition, and seem to have now become the favourite revolver for service in the field.

#### REVIEWS OF BOOKS SUITABLE FOR NAVAL AND MILITARY LIBRARIES.

Arminius Vambéry: his Life and Adventures. Written by himself. With portrait and fourteen illustrations. London: T. Fisher Unwin, Paternoster Square.

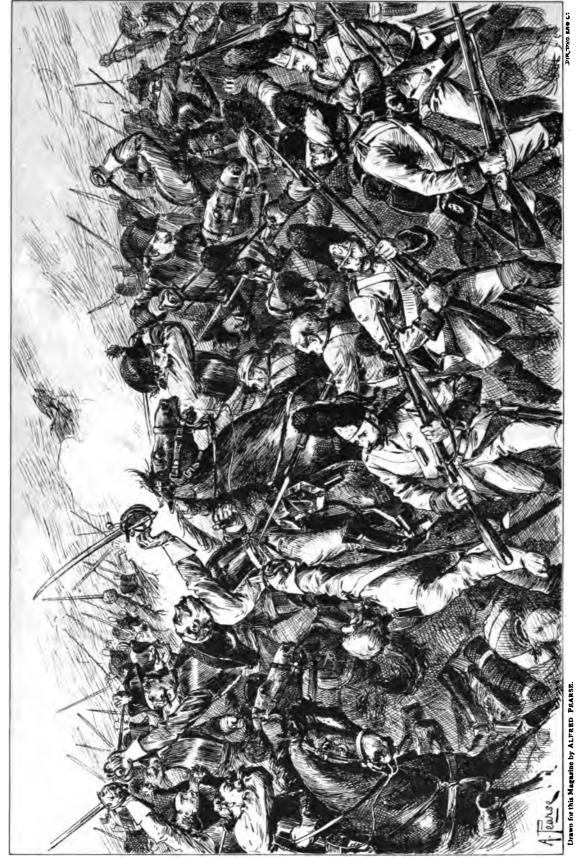
Mr. Vambery has written a personal narrative of his travels and adventures in Central Asia and Europe in a style calculated to please a large class of readers who prefer light reading rather than geographical and other observations which go to form the real book of travel. Mr. Vambéry is typical of a class of men always to be found in the Levant, no matter what their nationality. Greeks, Levantines, Italians, Hungarians, Poles, and some few Syrians appear to possess the attributes in common which enabled Mr. Vambery to start in life at. twelve, a cripple and a dressmaker, ultimately to find himself landed in England as a "lion in London." How he performed this extraordinary feat the reader will learn who reads the book carefully through, and we venture to believe that in the attainment of his object—to travel from Buda-Pesth to Samarkand, Herat, Teheran, and Trebizond he displayed all the subtleties of an Oriental with those qualifications supposed to be peculiar to the Bohemian. That the author was a man of great linguistic capabilities is evidenced by his knowledge of both European and Eastern languages, and to this may be added an extraordinary memory of books, e.g., the Koran, which proved useful to him in times of danger, when he was suspected of being a European. After quitting the dressmaking business he became, after the fashion of his kind, a tutor, then penniless, and turned teacher of languages, by which he made some friends who "assisted" him to prosecute his travels, and at last he got fairly on the road. In all his descriptions, from life in Stambul until the completion of his tour through Central Asia, he is always the leading figure, and every one who reads the book cannot fail to be gratified at finding how largely the "self-preservative faculty" was developed. The professional diner-out of modern society is far behind our now transmogrified author, "Reshid Effendi," who by intuition could pick out what he calls "well-disposed stomachic patrons." Indeed, so successful was he—never having a piastre in his pocket—that it is no mere figure of speech to say that he had reduced the method of dining for nothing on the best of everything to one of the "fine arts." The following extract will illustrate what we have just said :- "A few stanzas from Petrarca or Tasso suffices to attract the attention of the cuoco (cook). A conversation in pure Tuscan soon followed, and the upshot was a wellfilled plate of maccaroni or risotto, capped by a piece of boiled or roasted meat. 'Mille grazie, Signore' (a thousand thanks, sir) meant that I would come in the evening to claim a continuation of the favour shown me.

Our author bids farewell to the Golden Horn and proceeds to Erzerum, vid Trebizond, and from there to the Persian frontier. His journey through Persia is well described, and his observations on the customs of the country are very interesting, especially the account of the different bazaars and of a Persian

miracle play called "Tazie." It did not, however, strike us that the author has shed much new light on this country. The rest of the book is devoted by Reshid Effendi to an account of his journey through Central Asia, which is full of thrilling incident, and some of the scenes and customs described, such as the slave trade, his audience with the Khan of Khiva and many others, show the author to be a man of quick perception, ready resource, great powers of dissimulation, and undoubted bravery. His intense hatred of the Russians, however, plus his knowledge of Central Asia, are in themselves scarcely sufficient to make a great diplomatist, and that Mr. Vambery was not regarded as such at the time he was received as "a lion in London" is shown in the chapter wherein he describes his interview with Lord Palmerston, notwithstanding the fact that "he warned Lord Clarendon," and adds, "I would have continued my political argumentations, but the servant having announced a new visitor, I left the house fully convinced of the feasibility of my plan. And so I am even now.' In Paris society he appears to have fared better than in London, and his interview with Napoleon III. is well The book concludes with an account of his being appointed Professor of Oriental Languages at the University of Pesth, and a chapter "On my political writings," wherein he proves himself to his entire satisfaction to be one of the ablest political writers of the day, and adds "I may conclude with the saying, 'Dixi et salvavi ammam.'"

A Fly on the Wheel; or, How I helped to Govern India. BY LIEUT-COLONEL THOMAS H. LEWIN. (W. H. Allen & Co., Waterloo Place, S.W.)

This book may be defined as being the mature reflections of an Indian officer on his past career. After having read the book an impression is left on the mind of the reader that Colonel Lewin is not satisfied with the result. Be this as it may, there can be no question that when once Colonel Lewin became appointed superintendent of the hill tribes of Chittagong, he soon evidenced his fitness for the post and earned for himself a name that stands high among frontier reputations. Young officers proceeding to India will learn from this book, how by confidence in themselves and the exercise of strict justice they may attain high and important posts there. The book, with some few exceptions, gives an excellent account of Indian experience, and the chapter on the Leeshai Expedition unquestionably shows that Colonel Lewin's strong influence over these tribes led to their complete subjection. As the Calcutta Observer wrote: —" The military commanders did their work well, but assuredly it was the political officer (Colonel Lewin) with the right column, who gave to the Expedition its claim to be considered to have completely effected all that had been expected of it." The Star of India was awarded to the general commanding. Colonel Lewin's services were spoken highly of by the general.



THE CHARGE OF THE PRUSSIAN CUIRASSIERS AT THE BATTLE OF FREIBURG. 29th October. 1762

#### THE

# ILLUSTRATED Habal and Military Magazine.

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#### OUR FRONTISPIECE.

#### THE CHARGE OF THE PRUSSIAN CUIRASSIERS AT THE BATTLE OF FREIBURG.



HE last campaign of the Seven Years' War was undertaken by Frederick the Great under circumstances of a terrible nature. For six years previously the king had, with varying fortunes, yet with unswerving purpose, resisted with the most astounding military

skill the tremendous combinations against him, of France, Austria, and Russia. He beat back their armies, which operated singly or together to destroy the new Prussian He foiled in the most masterly manner, kingdom. every effort directed towards the partition of Prussia, with unconquered resolution to die sword in hand, rather than allow his faithful subjects to become the prey of rapacious neighbours. The Herculean task he had with unshaken spirit sustained so long and so firmly, was, in the latter part of 1761, at last bringing home to the minds of those who had persistently endeavoured to rob him of his territory, the conviction that this extraordinary king and general could not and would not be beaten, so long as health and life remained to him. In the beginning of the year 1762 his enemies commenced to show signs of exhaustion. The great king began the campaign of this year, with poor exchequer and inadequate means in men and material, to resist the arms of the great powers united to crush him, and the valiant soldiers who had so long fought under his magnificent leadership.

At the commencement of the campaign of 1762, the army of the Austrian empire was spread over a considerable tract of country between Dresden, Tharand and Freiburg. Their advanced troops touched the Triebsche on the east and the Mulde on the south. In face of a powerful but exceedingly cautious and timid opponent, the Prussian Prince Henry wisely resolved to assume the offensive. By a resolute and

well-sustained attack, he broke their line at Döbeln and cut their army in twain; but, unluckily for the immediate success of the Prussian cause, the weakness of his force precluded him from adequately following up his advantage. The ill-success of the Prussians in a number of secondary encounters threatened seriously to diminish their prestige. Once more, however, a favourable opportunity offered, and Prince Henry was quick to avail himself of it. General Hadick, with a considerable force, had left the allied army for Dresden, in order to celebrate a victory gained through the ill co-operation of the Prussian leaders. Although after his departure the Austrian force was still numerically superior to the Prussian army, the chances were not so unequal as they had hitherto been. Prince Henry therefore determined not to await his expected reinforcements, but to attack with twenty-nine battalions and sixty squadrons, an entrenched enemy numbering forty-nine battalions and sixty-eight squadrons.

The Austrian troops were formed up before Freiburg. Their right wing was protected by a series of uncompleted works extending to the Spittelwald, which was held by a large body of troops, and rendered as impenetrable as possible. In the rear of this wood, were their centre and left wing. Prince Henry's plan, which was based on an intimate knowledge of the country, was to keep his enemy employed in front, and, under cover of the wood which he hoped would conceal his operations, to turn their left flank. He divided his force into four attacking columns. The command of one, sixteen battalions and forty squadrons strong, intended to bear the brunt of the action, devolved on Seydlitz. Prince Henry himself took the command of another.

At 8 o'clock on the evening of the 28th October 1762 the Prussian troops left their quarters and stood during the night drawn up in column in a thick wood. At day-

break on the 29th, the two columns commanded by Prince Henry and Seydlitz took up a position between Klein-Scherina and the hill of Saint Michael. The village, which was occupied by a body of Croatians and Saxon Dragoons, was speedily carried by General Kleist in command of Seydlitz's advanced troops. Thus far everything had been favourable to the Prussian enterprise. After the village had been stormed, however, a considerable body of hostile troops appeared on its further side and poured in a sharp and unexpected fire upon the Prussian force. The success of Prince Henry's expedition depended on the character of the hostile leader; but the intelligence that the force was commanded by Lieutenant Field Marshal von Meyer, a general well known for his cautious timidity, induced Prince Henry to leave a small force to watch and hold him in check. The rest of the attacking force, therefore, made a slight detour and encountered the main body of the enemy as was originally calculated.

At first the success of the enterprise hung in suspense. The Hungarian Grenadiers, well supported by the Austrian Cavalry, made a resistance which baffled all the attempts of the Prussians. But the honour of the Prussian name was soon to be retrieved. Seydlitz, the Cavalry leader, putting himself at the head of two battalions of Grenadiers, completely shattered the brave and stubborn Austro-Hungarian force; and then assuming with amazing rapidity the command to which he was most fitted, followed up his success by a brilliant Cavalry charge, driving the discomfited enemy across the Mulde. The Spittelwald was speedily carried, the Austrians retreating in disorder and with considerable loss. A large body of men belonging to two Austrian line regiments threw themselves into the courtyard of a hospital surrounded by walls, and for some time held their pursuers at bay. Two squadrons of Prussian cavalry, however, which had been ordered to pursue the retreating foe, arrived, opportunely, on the spot. A number of troopers threw themselves without orders from their horses and burst open the gate in the face of a heavy fire from the windows of the building. squadrons poured into the court, and seventeen Austrian officers and 700 men were taken prisoners.

In the mean time, the two other Prussian columns had encountered a resolute resistance in the front of the enemy's line, and had made but little progress. Seydlitz, therefore, desisted from the pursuit and attacked the left of the enemy's centre, doubling it up in a manner that brilliantly recalled his earlier exploits. Prince Henry at the same time sent his adjutant, Captain Count Kalkrenth, with an order for his left wing to advance, and despatched General von Stutterheim against a body of the enemy stationed behind the village of Klein-Waltersdorf. The Prussian infantry was supported by the regiment of Schmettan-Cuirassiers and Von Belling Hussars. The

Austrian Cavalry was rendered practically useless through the terrible Prussian fire; but their eight battalions of infantry stood firm, and, formed up in two brigades, repulsed with considerable loss the attack of the Hussars. It was left to the Prussian Cuirassiers to decide the fortunes of Advancing with wonderful intrepidity, they shattered the first brigade, but were met with a terrific fire from the second. Quickly recovering themselves, the Cuirassiers charged the second brigade, and, though they encountered a stout resistance, were again victorious in their onslaught. Meanwhile, the first brigade had rallied and formed square; and the gallant Cuirassiers after their second victory found themselves confronted by an enemy whom they had probably thought entirely disposed of. Undaunted, and with a hearty cheer, they charged for the third and last time, and completely swept the Austrian force from the field. The eight battalions of Austrian infantry were almost annihilated. Those who escaped the terrible charges of the Cuirassiers were taken prisoners by the previously discomfited Hussars. But their exploits were not yet finished. Leaving to the Hussars the pursuit of the flying Austrian Infantry, the Cuirassiers once more advanced, took two batteries, and, effecting a junction with the Cavalry of the Prussian Right under Seydlitz, pursued the retreating Austrian Cavalry to the gates of Freiburg.

The Austrian army, which in point of numbers was decidedly superior to the Prussian force, was totally defeated. The Austrian loss was 5,400 men, while thirty-one guns and nine colours fell into the hands of the Prussians.

Our artist has chosen for his subject the final charge of the Prussian Cuirassiers.

The battle of Freiburg was the last serious engagement of the Seven Years' War, a period during which the astounding genius of the king had shone forth as a beacon that was to throw an everlasting light of splendour over all the Prussian kingdom, to tell surrounding nations that one great monarch, supported by subjects as faithful as they were brave, as patient as they were enduring, had proved to friends and enemies that he could oppose rapacity with skill, jealousy with firmness, and brute force with mental power. Frederick had indeed set before all men for all time, a lesson they should never cease to learn.

Colonel Charles Brackenbury in his Frederick the Great says: "For seven years, the little kingdom of Prussia had held her ground against three great military powers, Austria, France, and Russia. All were now equally exhausted, the constancy, courage, and ability of Frederick were rewarded at last; on the 15th of February, 1763, the treaty of Hubertsburg was signed, by which Austria once more agreed to the cession of Silesia; Prussia was now a great power like the rest, her greatness resting on no shams, as she had proved."

# THE WRECK OF THE "ABBAS."

"Gut Nacht, Gordon!
Ich denke einen langen Schlaf zu thun."
Schiller's Death of Wallenstein.



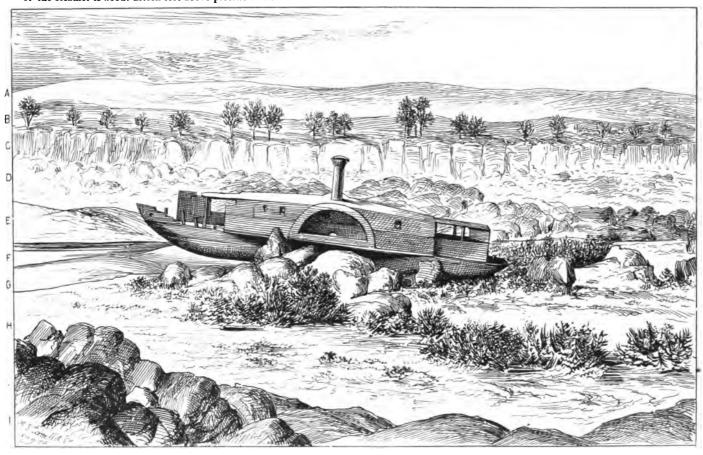
HESE words of prophetic farewell, which the poet puts into the mouth of Wallenstein on bidding good-night to his friend a few hours before his murder, might, with strange propriety, have been uttered to their very letter on the

day when Donald Hamill Stewart shook his heroic friend Gordon by the hand and wished him good-bye at Khartoum. For upwards of five weary months three Englishmen had held that beleagured city against myriads of foes thirsting for their blood. Hardly a day had passed without an engagement, and day and night the Arab bullets kept falling in and about the building from which they directed the operations of defence. Food had become

scarce in the crowded garrison which included in its numbers hundreds of women and little children. Money was short, and there was treachery within the lines. Yet there was no thought of surrender. Animated by the calm and lofty courage of these three Englishmen, Gordon, Stewart, and Power, the defenders of Khartoum held out day after day, week after week, month after month, fondly believing that British rescue would come at last. But as the circle of fire narrowed around the devoted band, and as hope was almost giving way to despair, the masterspirit, whose grandness of soul had been an inspiration of all, bethought him of a last chance to save the people for whom he had fought and laboured so long. Gordon made up his mind to send Stewart and Power in a steamer to

## SKETCH OF COLONEL STEWART'S STEAMER "ABBAS."

Taken from an eminence on the island on which it was wrecked, looking towards the right bank of the Nile. All the woodwork had been removed by the natives, the ironwork only remaining. The after-part of vessel was full of sand, the engines do not appear to be much damaged. The bottom of the steamer is about fifteen feet above present water-mark level.



A. Low rocky hills, distant 1,000 yards; B. mimosa trees; C. low sandy cliffs about twenty feet high: D. foreshore, sand and rocks; E. undulating sand; F. pool of water forming part of channel around island at high Nile; G. undulating sand; H. ditto, interspersed with rocks and bushes; I. foreground, rocks.

Dongola to endeavour personally to obtain the British aid for which he, by letters and telegrams, had long asked for in vain. A last appeal is penned to the English and Egyptian authorities at Cairo "How many times have we written asking for reinforcements? No answer at all has come to us, and the hearts of men have become weary of this delay. While you are eating, drinking, and resting on good beds we, and those with us, both soldiers and servants, are watching by night and day, endeavouring to quell the movement of this false Mahdi." And then he tells them that he is about to send Colonel Stewart and Power "because you have been silent all this while and have neglected us, and lost time without doing any good."

It may be taken for granted that it was with no ordinary pangs of parting, that Stewart and Power bid farewell to their chief and friend to undertake their hazardous mission. Gordon was to remain alone to hold Khartoum; Stewart and Power to push on to Dongola and tell the story of the siege, so that the rescue so long withheld might be sent at last. A writer in the press has asked the reader to imagine the gloomy thoughts that must have filled the minds of the three Englishmen. as they stood alone beneath the sultry sun and confronted month after month the pitiless hail of shot which never failed for a single day. But the mother of the ill-fated Power asks with a more touching eloquence for the imagination to dwell upon the scene on that September morning when the three Englishmen, nearer grown to one another than brothers, clasped hands in a last farewell "Telegrams had been sent with no avail; letters with no avail; solemn despatches proclaiming their need, and still with no avail!"

On September 10th, Colonel Stewart and Consul Power with M. Herbin, the French Consul, several Greeks and natives, left Khartoum on board one of the small steamers, the Abbas, which formed one of the flotilla which Gordon had made such good use of in defending the city. With Colonel Stewart, Gordon sent his journal of the siege from March 1st to September 10th. Stewart's own journal, he declares, was "a gem, illustrated with all the Arabic letters of the Mahdi to me, &c." Two other steamers were told off to accompany the Abbas. All these vessels Gordon had protected with plates of soft wood and iron, which rendered them bullet-proof against Arab musketry-fire.

The three steamers reached Berber in safety, when two of them went back, the *Abbas* continuing her way towards Dongola. All went well until September 18th, when, after passing Abu Ahmed at the bend of the Nile which incloses Mograt Island, the steamer struck upon a rock. All that

is known of what occurred afterwards, is derived from the story told by one of the native stokers, who escaped from the Arabs and joined General Earle's column:—

"We were then passing through Wad Gamr's country. As we passed down we had seen the people running away into the hills on both sides of the river.

"When it was found that the steamer could not be got off the rock, the small boat, filled with useful things, were sent to a little island near us. Four trips were made. Then Colonel Stewart himself spiked the guns and threw them overboard, and also two boxes of ammunition.

"The people now came down to the right bank in great numbers, shouting, 'Give us peace, and grain.' We answered 'l'eace.' Suleiman Wad Gamr himself was in a small house near the bank, and he came out and called to Colonel Stewart to land without fear, but said that the soldiers must be unarmed or the people would be afraid of them.

"Colonel Stewart, after talking it over with the others, then crossed in the boats, with the two Consuls and Hassan Bey, and entered the house of the blind man, Fakri Etman, to arrange with Suleiman for the purchase of camels to take us all down to Dongola. None of the four had any arms, with the exception of Colonel Stewart, who carried a small revolver in his pocket. While they were in the house they began to land in the boat.

"After a little time we saw Suleiman come out of the house, with a copper water-pot in his hand. He made signs to the people, who were all gathered near the house. They immediately divided into two parties, one entering the house, the other rushing down towards us who were gathered on the bank, shouting and waving their spears. I was with the party who had landed when they charged down. We all threw ourselves into the river. The natives fired, killing some in the river, many others were drowned, and the rest speared as they came near the bank. I swam to the island, and hid there till dark, when I was made prisoner with some others, and sent to Berti.

"I heard that Colonel Stewart and the two Englishmen were killed at once. Hassan Bey held the blind man before him, so that they could not spear him. They spared his life, and he afterwards escaped to Berber. Two artillerymen, two sailors, and three natives are, I believe, still alive at Berber, where they were sent by Suleiman. All the money found on board and in the pockets of those they killed, was divided among the men who did the murder. Everything else of value was placed in two boxes and sent under a guard to Berber. The bodies of Colonel Stewart and the others were thrown at once into the river."

Such was the end, so far as it can yet be ascertained, of Colonel Stewart and his party. He died young in years, and his military service had not been a very eventful one, having been passed in the 11th Hussars from the date of his cornetcy, in 1865, to that of his regimental majority in 1881. He had, however, for civil services received the C.M.G. and was a brevet lieutenant-colonel. He had cast his lot with Gordon when the latter accepted the task of restoring order in the Soudan, and he accompanied him from London to Khartoum. During the weary months of siege he rendered invaluable assistance, and although wounded kept pluckily to his work, and Gordon wrote of him that he was "a brave, just, and upright gentleman."

His body like that of his friend—thrown into the Nile—will never have monumental stone to mark its resting-place, but this epitaph will remain. The drawing is reproduced from a pencil sketch by a young officer of artillery now on service in Egypt.

## THE VALUE OF THE MERCANTILE MARINE IN TIME OF WAR.

BY MAJOR C. ABERCROMBIE COOPER, 4TH BRIGADE, WELSH DIVISION, R.A.



HE commercial power and prosperity of any country is not so much to be measured by its extent of territory, as by its length of coast-line and the number of its seaport towns. The greater the number of these towns, the more urgent, in these days of

progression, becomes the necessity for the establishment of lines of railway to every centre of trade within the line of coast.

A territory that is comparatively small in area, yet which possesses the above facilities for the development of its commerce, and has a continually-increasing redundant population, must, of necessity, seek for the means by which this population shall be maintained. Colonisation and affiliation by close ties to the mother country, are these means in the main. It therefore follows that the mother country becomes greater and more powerful through the colonial employment and enterprise of her worthy sons. Yet this very employment and enterprise, involving as it does the care and preservation of increased territory and commercial wealth, necessitates enlarged demands for protection from the covetousness of rapacious neighbours.

A country such as England, with an extensive coast-line, and an enormous network of railways to and from its commercial centres, has to defend its home and colonial coasts and seaports from the landing of a hostile force, to protect its sea highway to and from its distant colonies, and to make war upon its enemy's territory, whenever it is necessary to do so in defence of its material interests. In proportion, therefore, to increased colonial possessions, so has the carrying power of Great Britain across the seas become developed in every essential relating to wealth of commerce. being the fact, the Mercantile Marine, as this carrying power is aptly called, becomes in itself a powerful factor in the offensive or defensive measures necessary to be undertaken against enemies who may at any time threaten portions of the British empire in whatever part of the world they may be situated, or in protection of that vast commerce which contributes to sustain this empire's power and greatness.

In time of war, the Mercantile Marine of the British empire becomes of the very highest value in relation to the preservation of the nation's interests at home and abroad. This value has been over and over again, demonstrated in a most remarkable manner. Indeed, without its Mercantile Marine, Great Britain could neither act in offence against the territory of a dangerous enemy, nor

convey the means of defence against rapacious attempts to seize a portion of her distant possessions. It often happens that the relation of a brilliant victory gained in countries away from Britain, makes no mention of the important means which have contributed to the success of British arms—a success which never could have been achieved without the assistance of England's Merchant Navy.

Viewing these facts and circumstances, it is now proposed to show the value of our Mercantile Marine in time of war.

The history of the services rendered to the country in all times of emergency by our great mercantile navy would make a volume full of most interesting and, to the great majority of readers, surprising details, for from the days when a merchant ship was simply impressed without her owner's consent, to the present time, when the great shipping companies vie with each other in placing their splendid fleets at the disposal of the Admiralty, England has accepted these services quite as a matter of course, and seems to have never fully recognised their worth. This is the result of our being the greatest maritime nation in the world; we have been so accustomed to the possession of these resources, which to another country would be stupendous, that the ordinary Briton looks on them as part of his birth-right.

Since, some five and twenty years ago, the formation of the army of citizen soldiers—now an organisation of such magnitude and vital importance to the empire—roused the enthusiasm of all classes, there has never been wanting to them the fullest meed of public approbation, thoroughly earned as it has been, and yet, except in some official quarters, the value of the mercantile auxiliaries to the Royal Navy is seldom referred to. It will be advanced that these services are paid for by the country, but let us suppose that the full number of transports necessary on sudden outbreak of war were always maintained as part of the Royal Navy we should have not merely a large fleet lying idle in time of peace, but a considerable addition to the income tax to preserve them in serviceable condition.

Now—in addition to transport duties—we are calling on our steam-ship owners to provide war cruisers, as, some years ago, the Lords of the Admiralty came to the wise decision that the regular naval forces of the kingdom could be so supplemented, and great expense has been incurred by the companies in altering their existing vessels and in the construction of new ones, to meet the Admiralty requirements. We are now availing ourselves of the services of our mercantile marine:—

- I. As Transports.
- II. As War Cruisers.
- III. As Hospital Ships.

It would be impossible in the limits of a magazine article to give in detail the transport services rendered by

the various shipowners during and since the Crimean War, an important period in all naval and military records, marking the birth of so many reformations and other changes in the services; but the return which the courtesy of the Director of Transports enables me to give of the vessels at present employed will show to what an extent even a little war obliges the department to call on the merchant service:—

# EGYPT, 1885.—LIST OF TRANSPORTS ENGAGED.

0	Name,	Owner.	Gross Tonnage	Noml.   H.P.	No.	Name.	Owner.	Gross Tonnage	Non B.P.
ij	Poonah	Peninsular and Oriental Co.	3,130	550	45	Mounts Bay	Mounts Bay S.S. Co., Penzance	2,293	280
2	Bulimba	British India S. S. Co	2,503	300	46	Longnewton	Marquis of Londonderry	1,849	170
3	Lydian Monarch	J. Patton Jun. & Co	3,986	500	47	Rowens	G. Hood & Co., Glasgow	1,414	200
4	Geelong	Peninsular and Oriental Co	1,835	228	48	Heathercliff	C. F. Ellis	547	80
5	Deccan	Peninsular and Oriental Co	3,429	550	49	Argo	Bristol S. N. Co	963	210
8	Loch Ard	Dundee Loch Line S. S. Co	1,301	160	50	Chittagong	Henderson & Co., Glasgow	1,912	180
7	Arab	Union S. S. Co	3,169	500	51	North Durham	H. Roberts and Son, London	1,890	180
В	Australia	Peninsular and Oriental Co	3,664	60 <b>0</b>	52	Somerset	C. N. Glass	962	160
9	Italy	National S. S. Co	4,169	500 .	53	Bessarabia	Taylor, Cameron & Co., L'pool.	1,644	170
<b>)</b>	The Queen	National S. S. Co	4,457	420	54	Dilston Castle	Hall Brothers, London	1,639	150
1	Pembroke Castle	Castle Packets Co	3,936	450	55	Derwentwater	H. Strachan, Newcastle	1,253	140
2	Cameo	T. Wilson, Sons & Co., Hull	1,272	170	56	Albatross	General S. Navigation Co	1,450	184
3	Dunluce	Harland and Wolff, Belfast	877	98	57	Kingscote	E. Eccles, Newcastle	1,070	120
4	Oceano	Tatham & Co., London	1,004	99	58	Woodcock	R. Thomson, Glasgow	391	6
5	Calabria	Telegraph Maintenance Co	3,321	220	59	Kinsembo	British and African S. S. Co	1,868	28
3	Marcotis	Moss S. S. Co., Liverpool	2,141	250	60	Kottingham	Newton Brothers, London	1,290	15
, '	Nyanza	Mercantile S. S. Co	1,870	200	61	Florence	Pyman Brothers, London	2,213	18
3 }	Game Cock	W. B. Hill	370	200	62	Cyphrenes	C. W. Kellock, Liverpool	1,994	25
) 	Zurich	Turner, Brightman & Co.,	0,0	200	63	International	India Rubber Teleg. Works Co.		11
1		London	1,392	130	64	Mary E. Wadham		736	, 9
)    -	Ganges	Peninsular and Oriental Co	4,195	800	65	Favonian	F. Leyland & Co., Liverpool.		25
֡֝֝֝֡֓֞֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֡֓֓֡֡֡֓֓֓֓֓֡֓֡֓֡֡֡֡֡֓֡֓	•	Castle Packets Co	-	370				2,247	1
2	Conway Castle		2,966		66	Kangaroo	Telegraph Construction Co	1,773	16
3 !	Romeo	C. H. Wilson, Hull	1,840	350	67	Hoy Head	C. R. Scott & Co., Cardiff	363	5
- 1	Camel	J. E. Scott	293	50	68	lons	W. B. Thompson, Dundee	1,028	22
	Amethyst	Robertson & Co., Glasgow	533	85	69	Sylfaen	Kneeshaw, Lupton & Co., L'pool.		6
5	Elinburgh	Adamson & Ronaldson, London	2,330	250	70	Kent	F. D. Lambert, Jun	1,045	, 9
3	Stroma	Napier Shipping Co., Glasgow	958	160	71	Solway King	Burnyeat Dalzell & Co	320	6
7	Persian Monarch	J. Patton, Jun. & Co	3,922	500	72	Speedwell	E. Hancock, Cardiff	1,017	9
8	Camel	Harland and Wolff, Belfast	356	70	73	Wembdon	J. Ware, Cardiff	921	9
9	Knight of St. John	J. Prendeville & Co., Liverpool	275	66	74	City of Hamburg	Palgrave, Murphy & Co	1,219	15
0	Norfolk	A. Gibson, Liverpool	1,790	150	75	Lathama	W. Robertson, Glasgow	511	8
1	Seaham Harbour		- 1,904	170	76	Laleham	J. Temperley & Co	2,000	24
8	Dromore	Massey and Sawyer, Hull	1,110	130 '	77	Wolf	E A. Cohan, Liverpool	628	9
3	Osprey	General Steam Navigation Co	1,095	250	78	Newnham	J. Temperley & Co	2,010	24
ij	Ashington	W. Milburn & Co., London	1,252	180 i	79	Irwin	Pugsley & Co., Newport	989	9
5 ¦	Tiverton	W. Milburn & Co., London	2,673	350	80	Vito	W. Glynn, Liverpool	1,308	13
3	Topas	W. Robertson, Glasgow	353	60	81	Southgate	Turnbull, Scott & Co	1,779	15
7   	John Readhead	Rahtkens & Co., Middlesbro'	1,703	160	82	Camoens	R. D. Slimon, Leith	1,265	17
s ˈ	Caffila	Hay & Co., Sunderland	2,179	220	83	Longueil	Morel Brothers	1,711	14
9	Sceptre	Hall Brothers, London	1,718	140	84	Anjer Head	J. V. S. Angier	2,015	. 24
) ၊ ၁	Harley	G. C. Stewart, Liverprol	456	85	85	Elf	H. Samman, Huil	1,179	12
1	Coniston Fell	Haines, Smith & Co	323	65	86	Llangorse	C. E Stallybrass, Cardiff	1,758	1 18
2 '	Erato	T. Wilson & Co., Hull	1,515	150	87	Rouen	Adam Brothers	751	' 9
3	Argosy	J. Temperley & Co., London	1,955	150	88	Gardépee	Morel Brothers	1,733	14
								-,	

A considerable number of these ships are engaged in carrying stores of all kinds—ammunition, food, clothing, hospital necessaries, coals, &c. The steamers used for transport of troops are principally taken up from the Peninsular and Oriental, the Castle (Donald Currie), the Union, the British India, the National, and the Monarch companies.

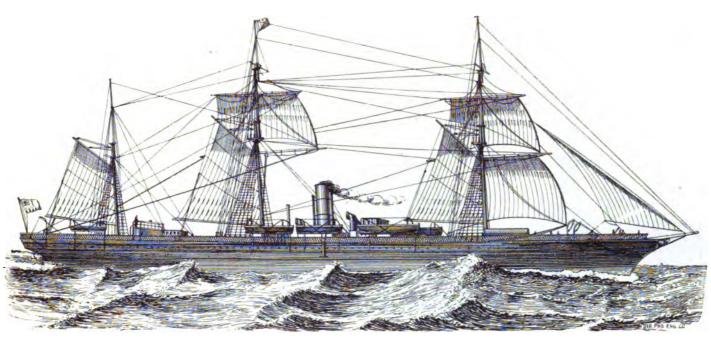
The ships of the first-named company have been so familiar to us, soldiers as well as civilians, as transports for our troops at all times, that a record of their services will be interesting and instructive.

The contrast between the old sailing transport and a first-class steamer will be well remembered by those who, going to the East in 1854-55, chanced to be stowed away

under the mail contracts, and to impress a large number of the company's steamers into the transport service. Among these were the Simla, Alma, Nubia, Colombo, and Ripon the four first of which the company had built and fitted expressly for the performance of the postal contract of 1853, and at one time no less than eleven of their steamers, measuring in the aggregate 18,000 tons, were engaged in the war service.

The total number of troops conveyed by the company's vessels was:—

Officers							1,800
Men .							60,000
And of h	or	ses	3				15,000



S.S. Australia, Peninsular and Oriental Steam Navigation Company.

Transport. 3,664 tons; 3,300 h.p., effective.

in one of the former class, and to return in a "P. & O." in 1856. Not that the old sailer was always miserable, even when her long protracted voyage put us on short commons, as, except for chronic sufferers from sea-sickness, there was generally some fun on board, but you did appreciate the comfort, the absolute luxury of the "P. & O." arrangements; the fresh meat, milk, and vegetables, the hot rolls at breakfast and, as our quondam allies would express it, grogs d discrétion three times a day. But to return to our immediate subject. The company has rendered the following important services in the transport of troops in cases of emergency:—

The sudden outbreak of the Russian War, and the urgent requirements of the Government for the means of conveying troops and *matériel* to the Black Sea and the Baltic, caused it to avail itself of the powers it possessed

The troopship *Himalaya* after being employed by the Admiralty as a transport in the early part of the war was sold to the Government in 1854 and is still employed in troop work.

The next services of this nature, and the most important in their results were undertaken on the occurrence of the Mutiny in India; between the months of September 1857 and June 1858 235 officers and 5,171 men were transported to India by the company's steamers, vid Egypt.

At the same time the *Madras* and the *Pottinger* were despatched from Bombay to the Cape of Good Hope and Mauritius respectively, and brought the 13th and 33rd regiments back to Bombay.

It is impossible to overrate the value of the assistance afforded in the suppression of the Mutiny by the arrival of these troops. At one time great uneasiness, and

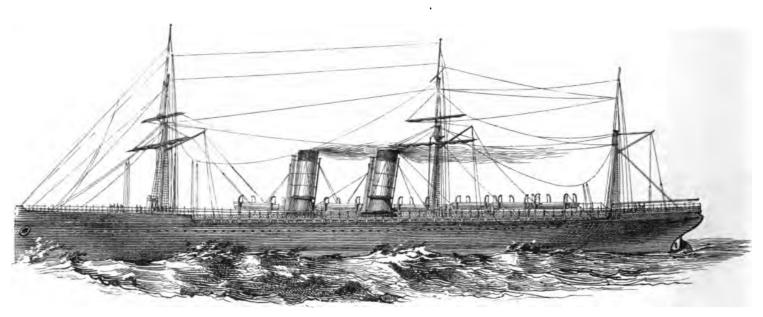
apprehension of an outbreak prevailed in Bombay, the island and neighbourhood having been almost denuded of European soldiers in consequence of the number sent into the interior, where the danger was more imminent.

The company's steamers were also engaged during this period in taking reinforcements to the garrisons at Malta and Aden. The total number of troops conveyed by the company in connection with this mutiny exceeded 10,000 men. The company also despatched to Suez for the use of the Government as a store and receiving ship, the *Precursor*.

In 1851, on intelligence being received of the outbreak of war in Kaffraria, the company placed the Singapore at the disposal of the Government free of hire, and a detachment of 500 men was immediately embarked,

the transport of troops, and the *Bentinck* was also transferred to them, and supplied the Allies with coals from their stores at Singapore; later on, when the necessity for heavy batteries was apparent, the company's vessels were again employed.

On the outbreak of the Abyssinian war in 1867-1868, and as soon as the Government had decided on despatching a body of troops to the country, application was made to the company relative to supplies of coals from the company's depôts to the ships employed in that service, and they came under engagement to furnish upwards of 70,000 tons of coal at Bombay, Aden, Suez, and Alexandria. The possession of stocks at these places enabled the company's agents to commence the delivery of coals to the Government transports before the period



S.S. Umbria, The Cunard Steam-ship Company.
Swift War Cruiser or Armed Transport. 7,718 tons; 12,500 h.p., effective; ocean speed 18½ knots.

and were the first reinforcements to arrive at the Cape from England.

The company's vessels were in 1852 and 1853 employed in conveying over 3,000 troops from India to Burmah in connection with the war with that country, and, when the East India Company's stock of coals had become exhausted, the company were able from their stores in India to supply a very large quantity to assist in the prosecution of this war.

The Persian war took place in the year 1857, and four of the company's steamers and their sniling ship *Haddington* were employed. Some of the vessels so employed were under fire.

On the outbreak of war with China in 1860 the company's vessels the Oriental, Hindostan, Pottinger, Granada, Azof and Chusan, were engaged by the Government for

at which special shipments from this country could possibly have reached the ports at which the fuel was required, and this and the other facilities afforded, especially at the company's establishment at Aden, whence large supplies of water produced by their powerful condenser were drawn, adds to the record of cases in which the resources of the company have proved of great national value in times of emergency. Six of their steam-ships and one steam-tug were also chartered by the Government for the purpose of the expedition.

In July 1871 information was received at Hongkong of the loss of H.M.S. Megæra and the landing of her crew on Saint Paul's Island.

The Directors were requested to send the Malacca off immediately to their relief, and that vessel, having received on board at great risk the whole of the crew, landed them

safely in Australia. By this means nearly 350 officers and men were saved.

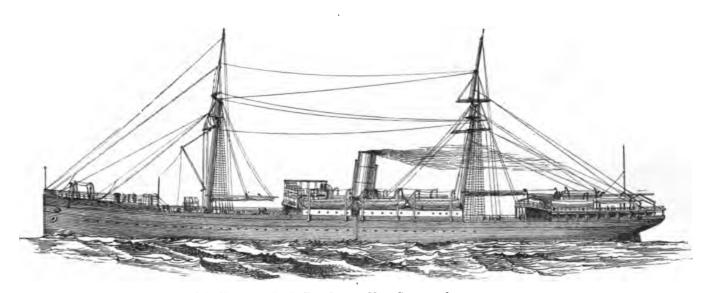
In 1878, during the Russo-Turkish war, the company were also engaged in the conveyance of Indian troops to Malta in connection with the precautionary measures taken by Mr. Disraeli's Government to avert a war with Russia.

In the early part of 1882, immediately before the bombardment of Alexandria, the company were asked by the Government to place their s.s. *Tanjore* at the disposal of the Admiralty.

The ship was used for the purpose of taking off the large number of European refugees who had to leave during the operations.

Our wars in South Africa have given employment principally to the fine vessels of the Castle Mail (Donald Currie and Co.), and the Union Steamship Companies.

During the Zulu war the "Union" steamers, Asiatic, Teuton, and American, conveyed troops to Natal, and in February, 1879, on receipt of the news of the disaster of Isandlhana, the Pretoria took the 91st Highlanders to Durban. She had just arrived at Southampton from her first voyage, and was docked, fitted with a new propeller, took in her stores and coals, and was ready to receive troops in less than nine days, being the first transport to leave England with reinforcements. She made the voyage to Cape Town in twenty days nine hours, and reached Natal in twenty-four days eight hours, being the fastest



S.S. Hawarden Castle, THE CASTLE MAIL PACKETS COMPANY.

Swift War Cruiser or Armed Transport. 4,241 tons; 4,000 h.p., effective; ocean speed, 14 knots.

Shortly afterwards, on the outbreak of hostilities in Egypt, the company's steamers Hydaspes, Khiva, Zambesi, Avoca, Deccan, and Sutlej were engaged in the transport of some 4,000 men and 1,600 horses from Bombay, and the Nepaul, Verona, Siam, Lombardy, Nizam, and Poonah, took at different times during the summer, 1882, nearly 6,000 men to Egypt.

Later on, when an expedition to Suakim was decided on, the company's steamers *Thibet* and *Bokhara* took some 1,500 men at a few hours' notice from Suez to Suakim and Trinkitat.

At the present time the company have under charter to H.M. Government the Deccan, Australia, Poonah, and Massilia

These vessels have been engaged in conveying troops to the Mediterranean garrisons, and to Suakim. The Zambesi, Geelong and Bangalore, have also been engaged in Bombay to convey troops to the same destination.

run from England to Natal ever made. The *Danube* afterwards took out a detachment of the 60th Rifles, and the late Prince Imperial accompanied them.

The sequel of that voyage may interest my readers. The Empress Eugénie, having determined to visit the scene of her son's death at Ityotyozi, embarked at Southampton in the s.s. German, accompanied by Sir Evelyn and Lady Wood, Surgeon-Major Scott and other friends, on the 25th March, 1880, and returned from Natal the following July, in the Trojan, also one of the Union Company's fleet.

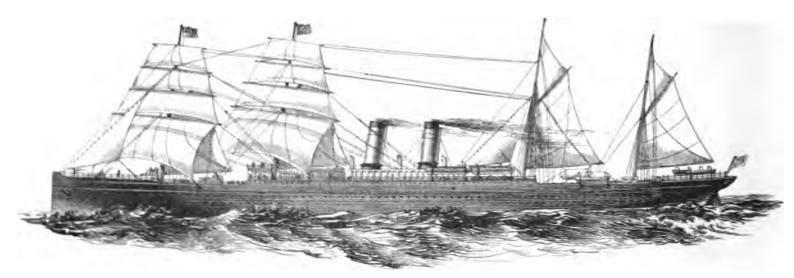
### II. WAR CRUISERS.

One of the special conditions entitling a ship to be entered on the Admiralty List is that she shall be divided by watertight bulkheads, so that she should continue to float in smooth water with any one compartment open to the sea; but practically the division insisted on and the height to which the bulkheads are carried would permit of any two compartments being broken into without more serious consequence than a necessary shift of water or other ballast to re-establish the vessel's trim.

Much value is attached by the Admiralty to an efficient disposition of coal bunkers abreast the engines and boilers for protection of the machinery against shot and shell, coal having been found by experiment to have great resisting power.

At considerable outlay on the part of many ship owners a number of large steamers have already been so adapted or specially constructed for the work of auxiliaries, thus

		Ocean speed in knots.
The America	(National)	. 18
The Alaska	(Guion)	$17\frac{1}{2}$
The City of Rome		
The Aurania		
The Servia	(do.)	. 161
The Austral	(Orient)	. 16
The Arizona		
The Vancouver	(Dominion)	. 15
The Hawarden Castle.	(Donald Currie & Co.	.) γ
The Hawarden Castle. The Norham Castle.	do.	<b>}14</b>
The Roslin Castle	do.	J
The Moor	(Union)	. 131



S.S. Vancourer, Dominion Line.
Swift War Cruiser. 5,217 tons; 5,000 h.p., effective; ocean speed, 15 knots.

forming a volunteer navy capable of giving most valuable assistance in time of war.

When it is borne in mind that the oversea commerce of England amounts annually to between fourteen and fifteen hundred millions sterling, protection to our trading ships by armed cruisers means the preservation of that trade, and the continuance of their freights to British ship owners, instead of the transfer of them to neutral flags.

There are already about 400 ships on the Admiralty List, of which nearly 100 are in the first class, that is, having a sea-going speed of thirteen knots and upwards with such eval-carrying capacity that many of them can take sufficient for a veyage round the world.

They include some of the finest and fastest ships affeat, such as:—

					rem spektů. Liktrinisk
The Parks .		(Cunani)			181
The United Co.		,d.x.			181
The Course		(i.x^			18

The America, built by Messrs. J. and G. Thompson, Clyciebank, now being fitted at Liverpool, will shortly proceed to one of the stations determined on to receive her guns. She is a type of what an armed cruiser (mercantile auxiliary) should be, of a gross measurement of 6,000 tons, length 432 feet, breadth 51 feet, divided into twelve watertight compartments and able to carry four 5-inch (new type) B.L.R. guns, two forward and two aft, and six 64-pr. M.L.R. guns of 71 cwt.

The Unitria, 7.718 tons, and the Oregon, 7,375 tons, are also about to be armed with four 5-inch R.B.L. and six 64-pr. M.L.R. of 64 cwt. The Politicke Castle, 3,936 tons (Castle Mail Packets Co.), has been ordered to proceed from Suakim to Hongkong, to be used as an armed transport. The Alexan, 5,932 tons, and the Arizona, 5,164 tons (Guien Line), and the Ermida, 7,718 tons (Cunard), are held at the disposal of the Admiralty. The Mor. 3,688 tons, and the Mariana, 4,669 tons (Union Steamship Co.), are ordered to Simon's Bay to receive their armament. The Mostler, 4,998 tons [P. and O.),

and the Kaikowra, 4,479 tons (New Zealand Shipping Co.), will probably proceed to Sydney to be armed, and the *India*, 4,056 tons (British India Steam Navigation Co.), now due at Colombo, is to be ordered to Bombay for duty as an armed transport.

The Admiralty has also obtained from the Italian Government the *Nord America* (late *Stirling Castle*) of 4,899 tons, with an ocean speed of 18 knots. She will be hired at Malta under the British flag, and be there armed as a first-class war cruiser.

These arrangements provide valuable assistance to our navy and some protection to our commerce in Chinese, Australasian, Indian, African, and Mediterranean waters, and can be promptly supplemented by further orders should occasion arise.

The sister ships, Hawarden Castle, Norham Castle, and

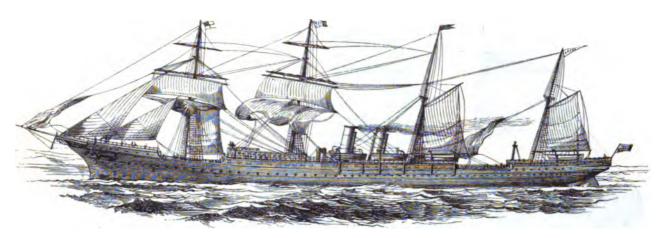
The guns at first decided on for the mercantile auxiliaries were:—

Four 64-pounder M.L.R. guns of 64 cwt. One 40-pounder B.L.R. gun of 35 cwt.,

but the large steamers now being armed are, as I have shown, to receive a much more powerful armament.

The 64-pounder M.L.R. gun of 71 cwt. is converted on the Palliser principle by boring out the old cast-iron 8-inch shell gun of 65 cwt. and inserting a wrought-iron tube. It is then rifled, and, in being proved, the tube becomes expanded and fixed into the casing. This is a more serviceable piece of ordnance than the 64-pounder built-up gun of 64 cwt.

In addition to case shot, and their studded projectiles of common and shrapnel shell, the 64-pounders take



S.S. Orient, THE ORIENT STEAM NAVIGATION COMPANY.
Swift War Cruiser. 5,386 tons; 5,400 h.p., effective; ocean speed, 15 knots.

Roslin Castle (Donald Currie & Co.), were specially designed and constructed to be available for Admiralty cruising purposes. In addition to the twelve watertight compartments they have stiffening bulkheads supporting the upper decks, which are, like the main deck, plated with iron and covered with teak wood of great strength to carry guns. An iron magazine is also supplied for twenty tons of ammunition.

Coal can be carried in the bunkers for thirty days' consumption at full speed.

There are large compartments for salt-water ballast, and tanks for fresh water, with condensing apparatus, besides a cold-air machine and refrigerating chambers to hold thirty days' supply of fresh provisions.

The main 'tween decks and the upper deck are lighted by electric lamps, supplied by a Siemens' apparatus.

There are ten boats on board, eight of them life-boats of the largest size, and a cork jacket is provided for each passenger and member of the ship's crew. 32-pounder S.B. ammunition, for which purpose they were given a calibre of 6.3".

The new pattern B.L.R. guns will render the old types of breech-loaders, and all muzzle-loaders, obsolete, for which the country will have reason to be thankful. The faulty muzzle-loading system, necessitating the manufacture of short guns—in the heavy natures the length of bore being only from twelve to sixteen calibres—because a muzzle-loading gun of proper length could not be used on board ship, has seriously detracted from the efficiency of our ordnance, both land and sea service.

The new 5-inch B.L.R. guns, with which some of the cruisers are now being armed, are entirely made of steel, its greater strength rendering the excessive thickness of metal at the breech no longer necessary; or, to quote from a lecture by Colonel Maitland, Superintendent Royal Gun Factories, "in order to get an increased ratio of power to weight, thickness of metal at the breech is turned into length at the muzzle."

The projectiles are common and shrapnel shell and case shot; weight 50 lbs.; muzzle velocity, 1,800 f.s.

The guns and fittings for the auxiliary cruisers will be Mr. Barnaby, made this department his special care. kept in store at the following stations:—

Chatham, Bombay,
Sheerness, Hongkong,
Portsmouth, Simon's Town,
Devonport, Sydney,

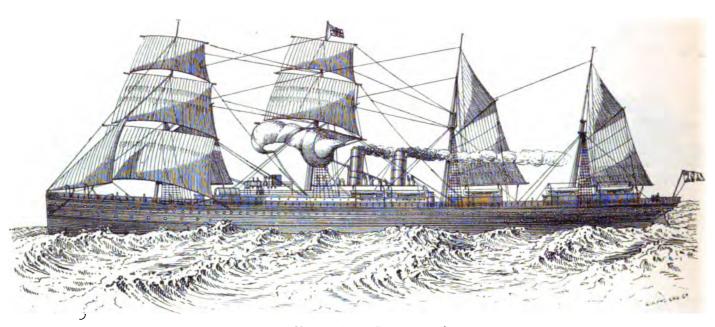
so that a steamer may be taken up at any port and sent to the nearest station to receive her armament.

There must always be available sufficient officers and men for all fighting purposes, the crews of the vessels can only be counted on for navigating and engineering duties; this seems to be, therefore, a special opening for the utilisation of the Royal Naval Reserve.

that has been shown by Mr. Dunn, one of the chief constructors of the navy, who has, under the able direction of Mr. Barnaby, made this department his special care.

## III. HOSPITAL SHIPS.

During the Egyptian campaign of 1882 the P. and O. steamer Carthage was taken up by the Government and employed as a hospital ship during the whole period of the war, being specially fitted for that purpose; and now another of the same company's fleet, the Ganges, is doing good service in the same capacity at Suakim. A detailed account of her will have much interest at the present time. Flying the Admiralty flag at her stern as well as having a broad ribbon or band of red painted all round her, and the famous Red-cross flag at her mast-head, we at once recognise her as the "hospital ship" Ganges.



S.S. Arawa, Messrs. Shaw, Savill, and Albion.

Swift War Cruiser or Armed Transport. 5,026 tons; 5,000 h.p., effective; ocean speed, 13 knots.

The services that can be efficiently performed by mercantile auxiliaries are the protection of British trading vessels and the destruction of the enemy's; employment as despatch and look-out vessels attached to a squadron, and —as has been well pointed out by Mr. Sutherland, M.P. for Greenock—the supply of coal, ammunition and stores to the armour-plated ships of the Royal Navy that may be engaged in blockading a port, or be stationed where it would be impossible to obtain supplies. The division of these cruisers by bulkheads renders them neither convenient nor desirable for use as transports, and, except in case of actual necessity, they should not be so employed.

It would be impossible to speak too highly of the zeal

Immediately on coming on board we see a large boat fixed overhead on strong iron skids or beams; this is a flat-bottomed boat about forty feet long, with the stern end so arranged that it can be lowered, and thus form a kind of platform to serve either as a horse-boat, or for the easier embarking of the wounded to be taken from the coast to the hospital ship. Attached to this boat are a number of stretchers fixed with slings, by which the wounded can be slung from beams or bearers, and so the more carefully carried to the vessel.

Going aft we notice two tents about ten feet long, constructed of light framing, and covered with canvas, with a kind of curtain door; these are for contagious

diseases, and kept right aft as far as possible from all others.

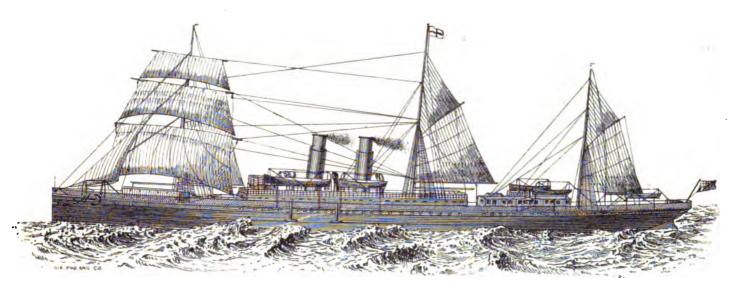
Walking forward we come to the side cabins, which have been fitted up for the principal medical officer and his staff, &c., excepting two or three that have been utilised for the following purposes:—1st, dispensary, fitted up as directed for that purpose; 2nd, what may be termed washing-rooms—or disinfecting and washing-rooms, one compartment is for disinfecting, fitted with a large trough, and so arranged that the soiled linen can be passed in through a window or opening, where it is dealt with; adjoining this is the washing-room, in which is placed a large boiler; the linen is then passed to the washing and wringing machine, and from there to the mangling machine, where it is passed out ready for use.

Care has been taken to secure increased ventilation in

closet or chest, where, by turning on the steam, five or six small saucepans can be kept hot, so that during all hours of the night as well as day, the wounded can be supplied with beef-tea, sago, gruel, and other small comforts so desirable under such circumstances. It should be stated at once that similar provision is made in other parts of the vessel for the comfort of the ordinary soldier.

We now come to the officers' hospital wards, two wards of good size, and a description of these will answer for other similar departments.

The wards, as well as the whole interior of the ship, are well painted; the overhead is of dead white, and the sides and all other parts of an agreeable colour, so that wherever you look the eyes rest on a faint or light tint of green; even the deck is painted in the same soft and pleasing colour. In the hospital wards are fixed ten or



S.S. Ganges, Peninsular and Objectal Steam Navigation Company.

Hospital Ship at Suakim. 4,195 tons; 4,000 h.p., effective.

this important department. Not far from this is a cabin, formerly used as post-office, but now appropriated by the medical staff as their office, and furnished for that purpose.

Going well forward we come to necessary conveniences on the one bow and plentiful accommodation for washing on the other, some twenty wash-basins being provided for that purpose, with a good supply of water.

We now descend to the lower deck, and shall commence right aft. Here, on the one side, are baths and other conveniences for the officers, on the other are the quarters of the lady nurses, consisting of retiring-room fitted up with couch, table, easy chairs, chiffonier, and whatnots, comfortably furnished, as it should be for those devoted women who willingly and cheerfully do such good work; attached to this room is their sleeping accommodation, beyond which is a small kitchen or pantry provided with a steam

twelve light iron cots, hung at each end on stanchions or standards; the cots are fixed, but by lifting or removing a small catch they are made free and can swing with the motion of the vessel; these are also painted light green, and have at the head a small table fixed for holding any little necessary or comfort. Those cots close to the partition or framing have electric bells, by which the attendants can be summoned at any moment; over each cot are also fixed punkahs made of pretty cretonne, the working of which creates a refreshing current of air for the faint and weary; beside this, for further protection, mosquito curtains are provided, light frames are fixed or suspended three or four feet above the cot to which curtains are attached and allowed to fall all round the cot; add to this plentiful light and ventilation, and some idea of the completeness of the hospital ward can be formed.

We come now to the saloon, large and grand, which is left undisturbed for the comfort-of the convalescent.

Going yet forward we come to the men's quarters of wards; here the whole space is occupied with cots of precisely the same character, where punkahs and mosquito curtains are provided; here also the whole is painted in the same way as just described.

On this deck several cabins (private) have been set aside especially for officers who may be convalescent and able to leave their respective wards.

The day we were on board we saw a canvas screen round one cot, which at once told its sad purpose, viz., the inclosing without delay of any who may have died from their injuries.

On this deck, as on the lower, several commodious bathrooms are seen, also numerous washing places.

There is another important department described as the "operating room." This room is about sixteen feet long, and fitted at side and end with large sliding doors for the better convenience of bringing in the wounded; it has hot and cold water laid on, with steam also; a large ventilator reaching over the upper deck is provided, as well as three or four large ports at the ship's side, so

securing the light and ventilation requisite in such a department.

On this deck also there is a dispensary, thus obviating the necessity of going on upper deck for drugs, &c.

At the extreme fore end what is called a lunatic ward is built, which in this instance will serve also as prison, if either be found necessary.

There are in all about ninety-three iron cots for officers and men; on the second lower deck there is table accommodation for about 108 convalescent men, where 150 hammocks are slung in the usual way, and swing cots for those not quite recovered and so needing a little extra comfort. On this deck are bath and washing places.

In concluding this description I must not omit to mention the excellent ventilation secured on each deck by Dr. Edmond's patent, beside other means of securing the same desirable object. All the cots are numbered, and the various departments made clear by distinct writing, stating their various characters. The whole was executed under the direction of Captain Brownlow, C.B., and the medical department by Messrs Lester and Perkins, of the Royal Albert Dock, for the Peninsular and Oriental Company.

C. ABERCROMBIE COOPER.



# THE USE OF PHOTOGRAPHY TO OFFICERS.

THE utility of photography to officers at home and abroad is again drawn attention to. The works of amateur photographists now on view at the London Stereoscopic Company's "Amateur Photographic Exhibition" at 103, New Bond Street, show a marvellous aptitude in the art displayed by those who have taken up the study of photography as a useful amusement. From abroad, the pictures are numerous and excellently produced. A number by officers of both services are in evidence of the increasing interest shown in this amateur science. The gold medal in the officers class has been awarded to Major-General Sir C. Key's, and the bronze one to Lieutenant-Colonel Senior. Several of the winning pictures represent

various scenes in our eastern empire. The fact that dry plates can be procured at home ad libitum and can be used in any climate, and the pictures received in them produced at convenient times, is a great advantage. Officers abroad particularly, will find ample opportunity for utilising in a very profitable and interesting manner any leisure they may have available. Views of their residences or the localities in which they are serving can be taken either by the instantaneous or slower process, although the latter process is almost extinct. The London Stereoscopic Company will give free lessons to any officer who may be in London for a few days, and be desirous of easily acquiring the art of photography.

EDITOR.

# WITH THE 75TH AT BADLEE KA SERAI.

BY COLONEL R. BARTER C.B.



HE month of May, 1857, saw the Mutiny of the Native Army in Bengal, and the commencement of the events which, following thick and fast upon one another, in a few months ended the rule of the Honourable East India

Company, and made India, let us hope, for ever a glorious appanage of the British Crown.

The Meerut mutineers, after the massacre at that station, had moved off to Delhi, and joined by the garrison there (all natives) had butchered all the European and Eurasian portion of the inhabitants they could lay their hands on, as well as many of their own European officers, and, welcomed by the then great mogul, Bahadur Shah, and his rabble court, established the imperial city a centre for all the disloyal of the upper provinces to flock to.

For the purpose of retaking the city and stemming the tide of mutiny and rebellion, a force was with some difficulty collected at Umballa, consisting, besides the Artillery and 9th Lancers already stationed there, of H.M. 75th Regiment from Kussowlie, the 1st Bengal Fusiliers from Dugshai, and the 2nd Bengal Fusiliers from Subathoo; these troops had marched to Alipore, one march from Delhi, and were then reinforced by a troop of Horse Artillery and two 18-pounders, the 6th Dragoon Guards (Carabineers), 1st Battalion 60th Royal Rifles and Sirmoor Goorkha Battalion. The whole was now under Major-General Sir Henry Barnard, K.C.B., who succeeded to the command on the death at Kurnaul, a few days previously, of the Commander-in-Chief in India, General the Honourable George Anson.

Sir Henry Barnard broke up the camp which he had occupied since the 4th of June at Alipore, and at 1 A.M. on the 8th, commenced his march to Delhi, which we all knew was not to be unopposed. The advanced guard, with which was the General and his staff, consisted of a couple of guns and a squadron of 9th Lancers, and in rear of these marched the Infantry in column of sections, the leading regiment being the 75th, with whose share in the battle fought during this day I purpose to confine myself.

The march during the remaining hours of night was slow, with frequent halts, and it was not until just at daybreak that there was any trace of the enemy. I was then riding alongside of our colonel (Charles Herbert) at the head of the column, and drew his attention to a large fire which was blazing brightly some distance in our front and showing conspicuously in the semi-darkness of the early dawn; as we were still looking at it, suddenly the order

was passed from the staff, "Halt, halt-," and Major Laughton of the Engineers, taking a long tin case from a shootur sowar, or camel-mounted orderly, who was accompanying the staff, drew a map from it and called out "Here, General, I'll show you their position." Sir Henry replied, "There's no need, my good Sir, we can see that for ourselves, there they are," and he then ordered us to form companies and "close to quarter distance on the leading company," at the double, and then to "take ground to the right by fours" off the road. As this was being done, a jet of smoke spirted from a curious looking mound in the vicinity of the large fire which we had been remarking, and presently a round shot from a large piece of ordnance went tearing through a grove of mimosa trees towards which we were approaching, and bowled away to the rear, little patches of dust knocked up by each graze of it on the hard ground marking its progress. It was the first shot fired that morning, and the first fired in anger that most of us in the 75th had ever seen, and looking at my watch, I saw that it was just twenty minutes past four o'clock. We were now ordered to "Front turn and deploy on the rear company," the other regiments continuing their march to the right in fours; during the deployment the enemy were not idle, but kept pounding away with his heavy guns; one shot striking the horse of our interpreter, Captain H. Grant, 74th Native Infantry (one of the officers who had escaped from the mutiny of his regiment at Delhi, and who had been only a few days appointed to us), full in the chest, and passed right through his body. Captain Grant was severely shaken by the fall, but was otherwise uninjured, and able to keep with the regiment for the rest of the day on foot. He had only rejoined his own regiment a few days from furlough, when it mutinied, and he lost everything which he possessed, escaping only in the clothes he had on, and I think the horse here killed under him was one he had borrowed. Immediately after this, our first man wounded fell to the rear, his arm shattered from the elbow down, and it was soon evident that the enemy had our range to a nicety—in fact we heard afterwards that he had all the distances carefully noted along the front of his battery. We were now ordered to lie down while the other regiments were getting into position, and had abundant opportunity of becoming accustomed to the sharp vicious scream of the round shot as they flew over, breaking branches off the trees and ploughing up the ground all about us. We had been undergoing this "baptism of fire," for some minutes when a staff officer rode up and called out, "The 75th will advance and take that battery." Upon this Colonel Herbert directed the colours, which had hitherto been

folded up in their waterproof cases, to be unfurled, and the two ensigns, Pym and Row, stepping a few paces to the front, faced about and displayed their sacred charges, whose silken folds, now for the first time rustled by the breath of battle, expanded to our view. A great cheer greeted them, and the long line of nearly nine hundred fine well-seasoned old soldiers moved forward like a wall. Crossing a shallow watercourse here nearly dry, beyond a steep bank, we reached a wide plain, and could now see the enemy's position quite plainly from right to left. Straight to our front was the remarkable looking mound, the summit of which had been levelled and scooped out to the depth of about four feet so as to form a battery with embrasures, the centre one of which was armed by a

thrown into relief against the green trees of some fine gardens beyond. Between us and the enemy some low hillocks rose out of the plain, seemingly places where years before bricks had been burnt, but they were now for the most part covered with coarse scanty grass; and beyond the road to our left were three or four old tombs with domed tops in a state of partial decay, behind which some of our ammunition waggons were seeking shelter from the enemy's fire. To our right rear one of our troops of Horse Artillery, Money's I think, was in action, striving to make a reply to the far heavier guns to which it was opposed, and succeeding so far sometimes as to draw the enemy's attention from us and the General, who with the staff occupied one of the low hillocks to our front.



Unfurling the Colours.

twenty-four pounder howitzer, and in the other there were eighteen-pounders. To the proper right of this battery but beneath it on the plain, was the large fire already mentioned, and to the right of this and separated from it by some broken ground was a large serai, or square enclosure, for the accommodation of travellers, strongly built of stone and mortar, with a round bastion or tower at each corner, the right side of the serai as it faced us resting on the Grand Trunk read on which we had been Regiments were drawn up in line on the marching plain under the battery with Field Artillery on their flanks, while in rear of all could be seen the tents of a large

The fire of our Horse Artillery six-pounders seemed to have no effect upon the other artillery, which for the most part well sheltered was hammering away at the General and our advancing line, and it was only when some shot better directed than usual seemed to sting him like a mosquite, that he would turn upon our guns which on the open plain presented an easy mark, and soon wounded horses careering about and neighing piteously showed how good had been his aim. Two of the ammunition waggons also which had gone for shelter behind the old tombs on the left of the road were now blown up in quick succession, and men were beginning to fall fast in our own ranks, encampment, looking peaceful enough, the white tops, amongst them an oll mess servant named Humphrey

Dowton. As adjutant, I was directing the advance of the regiment and marching the centre sergeant of the colour party on the gun in the middle embrasure of the mound battery, and Dowton, who was in the left centre company, was dashed almost under my horse's feet; the shot striking him in the hip had crushed and mangled it all to pieces, and as my horse swerved aside the poor fellow looked up at me from the ground, and with a kind of smile said, "It's all up with me, Mr. Barter." His body, I fancy, must have been quite numbed by the shock, as he didn't appear to be suffering much pain, and his end couldn't be far off with such a wound. Another shot took off a man's head in the right centre company, dashing the brains in the face of Colour-Sergeant Walsh, one of the colour party, so that it was some time before he could see again, and for the rest of the day he presented a decidedly grim and ghastly appearance. The enemy's practice was most excellent,

and neatness, seemingly as indifferent to the shot flying around as if he were in his barrack-room getting ready for parade. Having completed his toilet to his satisfaction he ran up and resumed his place and step in the supernumerary rank with great complacency.

A little farther on and we reached the old brick hillocks upon one of which the general and staff had taken up their position, and here we were again ordered to lie down, pending the execution of some movement by another part of the force; and I now witnessed the fall of Colonel Chester, Adjutant-General Honourable East India Company's Army, and his orderly officer, Captain Russell, 54th Native Infantry, who, like our interpreter, Captain Grant, was one of those who had escaped after the mutiny of his regiment at Delhi. Both officers were riding grey Arab horses, one of which some evenings before, I had been admiring as he was being led about outside the dâk bungalow at



THE DEATH OF COLONEL CHESTER AND CAPTAIN RUSSELL

every shot almost striking the line, and flying close over it, and his guns were served with great rapidity, doing great credit to his teachers, upon some of whom he was now showing how well he had profited by their instruction. I was about this time witness to great coolness under fire of a boy bugler belonging to one of the companies of the right wing. Unable from his diminutive size to see what was going on in front, he kept endeavouring to get a peep between the files, and failed to observe that the puggerie which was wound round his forage cap (no helmets were worn by men or officers, except those on the staff, in those days) had got undone and was streaming away on the ground behind him. I brought this to his notice, telling him that he'd lose it altogether if he were not more careful, upon which he halted, and dropping on one knee proceeded to arrange his headgear with the utmost care

Kurnaul, from which his owner, Colonel Chester, came out to mount him, and, noticing my looks of admiration, began speaking to me about the horse, saying how fond he was of him, and that he had carried him in many a battle-field. This now was destined to be the last for both, for horse and horseman lay dying side by side. A shell had seemingly exploded on the front of Colonel Chester's saddle, and, breaking the horse's back, had torn him dreadfully, at the same time disembowelling the rider, who, as I have said, lay on his back close beside the horse, his helmet off and his white hair stained with blood and dust. He was actually able to speak to Captain Barnard, aide-de-camp to his father, Sir Henry, who was kneeling at his side holding his hand, and said, "Lift me up, Willie, and let me look at mv wound." Captain Barnard raised his head as well as he was able, and he then said, quietly and faintly, "That

will do, boy; go to your father." How he could utter a word was a marvel, for to me it seemed as if his stomach had been regularly scooped from the back, and lay on the ground beside him, and yet I heard afterwards that he lived for about a quarter of an hour. He was a noble old soldier, and a great favourite with all from his kindness and geniality. A little way off lay Captain Russell and his horse, both also mortally wounded, and in nearly a similar manner as Colonel Chester and his horse, but Captain Russell's wound was not so dreadful to look at, and he lay on his back breathing heavily, with his horse rolling in agony near him. It was a terrible picture of war under the rising sun on that bright June morning.

While we were lying down here, a man of the 75th, who was on duty as orderly, had a very narrow and curious escape. He got up from the place where he had been

man jumped to his feet and the order was shouted, "Square on the two centre subdivisions!" This was promptly done, and the men had just knelt to "Receive cavalry, ready," when a shell dropped inside the left-front angle, and, exploding, killed and wounded thirteen men, as well as I can now remember, and amongst the latter Captain Richard Dawson, the entire flesh of one of his legs being torn in shreds from the back of the thigh almost to the ankle. He was one of the very few who survived so terrible a wound, and though he saved his leg, refusing to have it amputated, he was yet invalided for life, and had to retire at the end of the campaign. These casualties were the worst we had yet had, and after all, the alarm of cavalry proved to be a false one; cavalry there were, certainly, but they were our own European cavalry, and how they could be possibly mistaken for the enemy is one of those things that "no fellow can understand." There was a good deal of talk about



A LUCKY MOVE.

lying a little to my right, and came close behind me on my left, saying, in a half-laughing way, "I'll come where you are, Mr. Barter; I think you're lucky, sir." He had scarcely said the words when a shot struck the identical spot which he had left a minute before, and, tearing up the ground, covered us both with dust and bits of broken tiles. He tapped me on the back and said, "What did I tell you, sir; didn't I say that you was lucky?"

Sir Henry Barnard had ridden to some other part of the field, and we were impatiently waiting for the order to advance when a staff-officer rode quickly to the top of one of the hillocks in our rear, and shouting, "75th get into square, the cavalry are on you!" turned his horse and disappeared as he had come, at a gallop. We could hear the tramp and jingle of a body of horsemen moving about our rear, though we couldn't see them; and in an instant every

it afterwards, and surmises as to who gave the order, but the officer who did give it kept a judicious silence, and though he was well known to more than myself, we didn't see the use of volunteering information, and the matter was allowed to drop, and was soon forgotten at such a time, except by the regiment that suffered so seriously by the mistake.

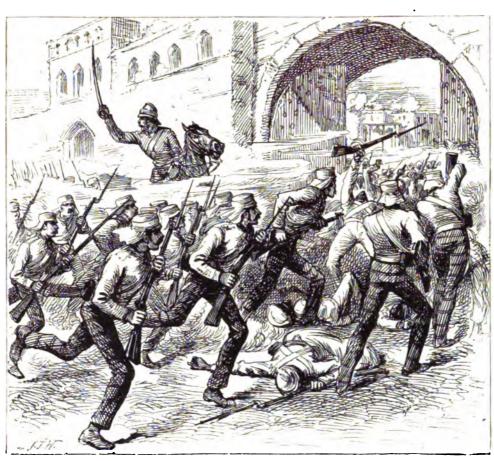
On discovering that the cavalry scare was a myth, line was re-formed, and shortly after the order arrived to continue the advance, and this was a sight to see and remember afterwards with pride, as in defiance of the storm of grape to which they had now become exposed, with arms at the slope, and silent as death itself, the men moved on without any hurry, but steady as on an inspection parade, with perfect cadence and dressing.

As we were advancing, Captain Delamain, formerly

adjutant 56th Native Infantry, and who was an old friend of ours—the two regiments having been quartered together at Umballa some years before—rode up to me, and after "Good morning," said, "I'll go in with the old pultun," the Hindostanee for regiment. He was on his way down country when the mutiny broke out, to take up the brigade-majorship of Cawnpore, to which he had been appointed, and attached himself to our force on finding his further progress impossible. He had lost his left arm at Chillianwalla, and lost his life, poor fellow, shortly after speaking to me. He rode alongside of me until we charged, when he moved off to the left, and I never saw him after, but heard that

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their being blown and useless when we came to close quarters, remembering that I had heard of such an incident having taken place in one of the battles in the last Punjab campaign, and in my anxiety I ventured to hint my fear to the brigadier, who very properly ordered me to be silent; and I soon saw how wise and judicious were his orders, for the "double" was changed to "quick" after we had gone some seventy or eighty yards, and the enemy having thereby lost our range for the time, the casualties in our ranks became immediately and perceptibly fewer It was while we were so "doubling" that Lieutenant Fitzgerald of ours, who was attached as Persian interpreter



THE ATTACK ON THE GATEWAY.

he had been shot through the head, and, of course, killed instantly.

I was now the only officer of the regiment on horseback, the horses of the other mounted officers having broken away from them while the regiment was lying down the last time; and Brigadier Showers, who commanded our brigade, was riding about twenty or thirty yards in front of the centre of the regiment. He now gave the order to "double," and this saved us much loss, as the shells and grape flew over us. I was myself quite mystified by this order, as we were too far from the enemy to hope that the men could make good a rush into his position, and I dreaded

to the headquarter staff, was riding rapidly along our rear, taking an order to somewhere on our right, when I saw him knocked off his horse, and I naturally thought he must be killed; but he was only badly bruised by a spent grape-shot, which struck him in the chest and brought him to the ground with great force. For days after he was all the colours of the rainbow. Poor fellow, he was a most gallant soldier, and would have been recommended for the Victoria Cross had he survived the campaign, but he was killed on the morning of the 14th of September, inside the Cashmere bastion.

We had now got to about a hundred and fifty yards of the

enemy, and through the smoke could see their line of infantry file firing at us, but without doing us much harm, old Brown Bess not being very reliable at that distance, and moreover the firing was wild and high, which the native officers observed and were trying to correct; we could see them depressing the Sepoys' firelocks with their swords, and hear them calling out "Neche shist lao, Neche shist lao," "Take low aim, Take low aim." Their grape had, however, been telling on us severely, but as I have said, without delaying for a moment the awfully determined, silent steady advance of the regiment, which to the enemy red-handed in meeting must have appeared a very Nemesis. The colours were in tatters, a shell having burst right between them and torn the silk to ribbonsstrange to say without touching either of the ensigns or any of the colour party. Men were falling fast, leaving gaps in the different companies, which were filled up the next moment, and not a sound was to be heard above the steady tramp of the line save now and then a suppressed cry of some badly-wounded man as he dropped in the ranks, followed by the sharp word of command, "Close up, men, close up, and mind your dressing." A shell burst in one of the companies of the right wing and made a big gap in it, and as the men recoiled involuntarily from the flame and smoke, I called out, "Don't turn, men, don't turn," and a voice replied instantly, "Never fear, Mister Barter, sir, we ain't agoin' to turn," and the places of the fallen men were rapidly and steadily filled up.

But the time had at last arrived to end our having to take all the punishment without inflicting some in return, and Brigadier Showers, whose grand courage and coolness throughout were exciting universal admiration in the regiment, which speedily ripened into feelings of real attachment. Turning round in his saddle he addressed a few short but stirring words of praise to the men, after which, galloping round our left flank, he rode up to me and inquired for the colonel, whom I pointed out to him a little on my right; he said, "Prepare to charge," and on the colonel repeating the order, down came the long row of glittering bayonets, while the line seemed to expand as each man sought more room for the play of that most terrible of all weapons in the hands of the British soldier. A few more paces to steady the line and then at last rang out the command "Charge!" The long hoped-for, longwaited-for moment had at length arrived. We had the brutal murderers of their own officers, as of many poor defenceless men, women, and children, face to face in the open field; and a wild shout or rather yell of vengeance went up from the line as the great rush commenced which, on this, as on many another well-stricken field, presaged victory for our Queen and country.

The enemy had imitated our movements so far that their bayonets were also lowered for the charge, and they advanced to meet us steadily enough, save that some began firing from the hip, and there seemed to be a con-

fused sound of low talking; but when that fierce exultant shout arose it appeared to send a shiver through their line, which began to undulate and waver. The wild desultory firing of men from the hip increased, and at last, as we were closing on them, the whole turned and ran for dear life, followed by a volley (which I regret to say did little or no execution) and a shout of derisive laughter, and a moment more saw the 75th swarming into the enemy's battery and outworks, and with these the large encampment, which proved to be that of our commanderin-chief, and headquarter staff left in the Delhi arsenal at the end of the last cold season, fell into our hands, together with quantities of commissariat and ordnance stores, and carts laden with "chupatties" or native cakes made of coarse flour and water, which are part of the usual food of up-country natives. Immediately after we had taken the position, Sir Henry Barnard rode into the battery, and grasping Colonel Herbert's hand, thanked him and the regiment in a most complimentary manner, saying, that in all his long service he had never seen anything more noble than the advance or more brilliant than the charge.

A smart rattle of musketry in and about the serai, which was on the right of the enemy's position, and from which the place was named Badlee Ka Serai, announced that there was some work to be done there; a number of the enemy had gone into this place—from five to six hundred men—and a party was sent to drive them out of At the entrance was a large iron-studded folding-door, which was shut, and thinking that of course it was barred inside there was a rush made against it to force it in; but the enemy had, luckily for our fellows, quite forgotten to "bar the door," and the result of the rush was that it flew open, causing the men who had run against it to tumble one over the other, thereby escaping in a great measure the confused volley fired by the defenders, who were speedily accounted for, not a man escaping. In the thick of the melée inside the serai, standing wrapped in meditation, and seemingly totally regardless or unconscious of the tumult and carnage around him, holding a firelock and fixed bayonet in one hand, stood a faqueer or religious mendicant; these were the gentry who acted as go-betweens amongst the native regiments, teaching and spreading disaffection wherever they went, and the meditation dodge did not serve this fe'low. There was a fine old babul tree growing outside the gate of the serai, and, a rope being procured from a cart on the road, in an incredibly short time the wretch was hoisted up to a branch, and was left swinging as an example to any others of his class who might pass that way.

I was not present myself at the taking of the serai and the episode which I have just related, and only give them as they were told me by one of the actors in both occurrences; but I saw a little later on the faqueer's body suspended from the tree, and surrounded by numerous evidences of the fight that had taken place in the serai. I must now hark back a little to account for my absence.

The ground for some distance in front of the enemy's position had been flooded by the turning on to it of the water from a canal with a view to impeding our advance, an effect which it certainly had to a certain extent, though it did us far more good than harm, for the grape-shot, instead of ricochetting, as it would have done off the hard ground if left in its usual state, now stuck in the mud; a pretty broad ditch had also been dug along their front, and this my horse, refusing to take, I got off him and made him over to my syce or native groom, who had never left me, and joined in the charge on foot. We had just commenced the final rush when I was struck by a bullet

ment his head fell back, and he was dead. I laid him back, and on removing my hand from under his head I found that besides a wound in the right side a bullet had entered his head, and his brain was now protruding through the wound; his sword still grasped in his hand was under him, and a man that was near him when he was hit told me that he was cheering on his company, with his sword raised towards the battery, and when struck by the bullets he made a half turn and fell on his back. We had been schoolfellows, and I had been sitting in his tent with some others the night before, talking of the engagement we expected the next day, and which proved so fatal to him, poor lad.

In a few minutes after I had been wounded, four



THE LAST ADVANCE.

under the left knee and pitched forward on my face and hands; on recovering myself I found that no bone was broken, but I was unable to walk, and so had to remain where I was. I bound up the wound with a handkerchief and began comparing notes with other sufferers, of whom there was a good number just then, and one of them showed me Lieutenant Harrison lying a little to my left front, and told me that he feared that he was badly hit. I crawled over to him on my hands and knees and found that it was but too true—he was gasping for breath and insensible. I couldn't see where he was wounded, and putting my left hand under his head, I undid his collar and threw some water on his face, speaking to him at the same time; but there was no reply, and after a convulsive move-

sergeants, sent by Colonel Herbert, came and carried me into the captured battery, and I have now to record a curious fact connected with this incident. The day after the battle, on the 9th of June, I received a note from my wife—who was with the other ladies of the regiment at Kussowlie, where we were quartered when the mutiny broke out—saying that during the night of the 7th she had had a dream in which she saw me lying wounded on the ground in front of a battery, from which four men of the regiment appeared to come, and, lifting me up, carried me in with them. This was what actually had occurred, and without attempting an explanation of it myself, I leave it for the consideration of the curious in psychical knowledge.

The capture of the enemy's position ended the battle of

Badlee Ka Serai, though the force was engaged for the remainder of the day until dark, when it took up the position on the ridge which looks down upon the city of Delhi. I don't think I can better conclude my recollections of the battle than by quoting an extract from a farewell general order on the occasion of the departure from India for home of the 75th Regiment; it is of Umballa, 19th March, 1862, and is as follows:

"Badlee Ka Serai was one of the first occasions on which the enemy in position offered serious resistance to the British troops.

"Advantageously placed in very difficult ground, the rebels in force prevented, with the fire of an intrenched battery of heavy guns, the advance to Delhi of the force under the late gallant Lieutenant General Sir Henry Barnard, K.C.B.

"The only means of effecting a passage was the capture of the battery.

"Resolutely led by Brig adier-General Showers, C.B., the

75th Regiment, exposed for twelve hundred yards to a destructive fire of round shot, shell and grape, which caused a very heavy loss to the regiment in killed and wounded, took the battery by storm, and enabled the British force to take up that same day their position before Delhi.

"Nothing more useful, nothing more brilliant was done during the late campaign than the opening at Badlee Ka Serai of the road to Delhi by the 75th Regiment."

The 75th lost on this occasion one officer killed, seven officers wounded, and seventy-five men and non-commissioned officers killed and wounded, the loss of the entire force being four officers killed, thirteen officers wounded, forty-seven non-commissioned officers and men killed, and 144 wounded, and the enemy must have had at least a thousand killed and wounded, and lost twenty-six guns; and yet not even a clasp was given for this important and well-fought action.



### THE VOLUNTEERS AS A PART OF THE ARMY.

The Standard newspaper has recently, apropos of the late Brighton review, written a powerful article concerning the organisation of the Volunteer force of this country and its utility in case of war. This article is well worth studying by all who are interested in this force becoming all that it should be, as an armed force for the defence of the country. In The Standard of the 15th of April there was a letter from a former Commanding Officer of Volunteers, which bears upon what has been attempted by the list of the Army published with this Magazine.

When this list was first planned, it became a question with the Editor whether some effort should not be made by him to show the British Army as a homogeneous whole, in the order of Regiments, for the purpose of doing away with the invidious distinctions inserted in the Army Listespecially with reference to the way the Militia and the Volunteers were placed and numbered. When preparing this list, he received a strong hint from a certain quarter that the time would soon come when these distinctions would be done away with and the Volunteers placed in their proper positions as numbered battalions of the territorial regiments. This period, so far, has not yet arrived. But the letter of the Commanding Officer alluded to, tends towards the required direction. At all events, this officer strongly suggests that the extraordinary anomaly at present shown by the way the Volunteer battalions are named and numbered in the Army List may be at once done away with. The Editor of this Journal would go further than this Commanding Officer. He would like to see all invidious distinctions absolutely abolished in the naming and numbering of line regiments with their several battalions, whether these battalions are Regular, Militia, or Volunteers. He would, as the Commanding Officer alluded to also suggests, have the whole of the Volunteer force clothed, armed, and equipped like their comrades of the

regular battalions, with all distinctions of lace and appointments for officers done away with. Great Britain should have but one army in all that relates to equipment, drill, and discipline. The only distinctions should be conditions of service, according to the nature of the force and the service required.

There are some officers of the former school who would still have the old condition of things with respect to the British army, in spite of the inevitable march of progress, which can no more be stayed by human agency than the motion of the earth around the sun. It is to be deeply regretted that there are some Commanding Officers of Volunteer battalions who will not conform to a proper order of affairs in respect to the close connection of their corps with their line comrades. They would rather resign, and see their battalions resign, than give up the independent position they wish to retain. If they desire to be soldiers and serve their country faithfully, it is only by obedience to military authority. The line regiments had their time-honoured numbers taken from them, and were called by long-sounding territorial titles. The officers grieved and were sore in spirit, yet they acted upon their orders like thorough soldiers accustomed to obey. If the Horse Guards decided to number the Volunteer battalions consecutively as units of the territorial regiments, would many of the crack corps be too proud to form one of the battalions of a regiment distinguished for its splendid achievements and which is a pattern to them in drill, discipline, and in all other military acquirements? It is hoped not. However, whichever way matters may turn concerning the numbering of Volunteer battalions, it is as well to say that the lists in this Magazine will have to be amended in conformity with the Army List, to await the period when the present invidious distinctions are abolished.

# THE RUSSO-TURKISH BOUNDARY IN ASIA MINOR AS LAID DOWN BY THE TREATY OF BERLIN IN 1878.

RUSSIAN TEXT OF GENERAL STEBNITSKI IN THE "VOGENNI SBORNIK" (Military Magazine).

Translated by MAJOR W. E. GOWAN, Bengal Infantry.



RIOR to the war of 1877-1878, the boundary-line between Russia and Turkey in Asia was that which was fixed by Article IV. of the Adrianople Treaty of Peace, concluded on the 2nd September, 1829. This border-

line, notwithstanding the assembly of more than one Commission after the conclusion of the treaty above-named, had not been accurately drawn throughout, and therefore misunderstandings had arisen in several places—misunderstandings which continued up to the time of the Crimean War. In consequence of this, by Article XXX. of the Paris Treaty of Peace, concluded on the 30th March, 1856, it was stipulated that the frontier-line between Russia and Turkey in Asia Minor should be examined and verified by joint Commissioners, viz., two each from Russia and Turkey, and one each from Engiand and France. This joint Commission began its work in the month of June, 1857, and concluded it at the end of the following year.

The boundary-line between Russia and Turkey, as fixed by Article XIX. of the Treaty of San-Stefano, being based on natural land-marks (mountain ranges), on being submitted to the Berlin Congress, was replaced, according to an agreement arrived at between Count Shouvaloff and Lord Salisbury, by a straight line very similar in its general features to the one drawn by Article LVIII. of the Berlin Treaty. The demarcation of a frontier-line in a highly mountainous locality, coupled with the undefined nature of the powers given to the British delegate and other unfavourable circumstances, gave rise to many difficulties, so that agreement as to the general direction of the border-line, and its subsequent demarcation, were, after great efforts and exertions, surmounted, but only after the lapse of three years.

The work of delimitation was carried on by two Commissions. On the first of these was imposed the duty of tracing the border-line from the shores of the Black Sea up to the village of Karaurgan. To the second Commission was entrusted the task of carrying a line from the said village up to the existing Russo-Turkish frontier-line in the Tandurek mountains; as also the renewal of such dilapidated boundary pillars along the rest of the frontier which remained unaltered by the last war between Russia and Turkey. In the first of these two Commissions Major-General Stebnitski was the Russian delegate, Colonel

<sup>1</sup> The Russian Commissioners were Major-General Chirikoff and Colonel Ivanin; the Turkish, Hussein-Pasha (famous afterwards as the War Minister, Hussein-Avni Pasha), Colonel Osman Pasha; the English, Colonel Simmons; and the French, Pelissier, at one time Consul-General in Tunis.—Author.

Shehab-Bey the Turkish. In the second Major-General Zelenoi (the President of the Russian Commission for the joint settlement of the Russo-Afghan boundary) was the Russian delegate, Colonel Jevad-Bey the Turkish, and the British member was, firstly, Lieutenant-Colonel Clarke, and afterwards Major-General Hamley. The negotiations and references as to the general direction of the entire Russo-Turkish boundary, according to the basis of the Berlin Treaty, were carried on at Constantinople in 1879-80, through the medium of special Commissions, of which Major-General Stebnitski was a member.<sup>2</sup> The first Commission finished all its work on the spot by July 1881, and the second Commission completed its labours by October 1880.

The new boundary between Russia and Turkey on the Black Sea begins at Cape Kopmush, which stands out at a distance of 261 versts (178 miles) south-west of the port of Batoum, and  $18\frac{1}{2}$  versts (12\frac{1}{3} miles) south-west of the mouth of the river Chorokh. Thence it abruptly ascends the so-called Pontus range, which, at a distance of 1 verst (2 mile) from the coast, attains an elevation of 1,750 feet. The boundary-line then runs along the top of this range which separates the affluents of the Chorokh, viz., the Beglevan-Chai, Itchkala, Murgul-Su, and Khatila-Su from those rivers which directly fall into the Black Sea, viz., the Khopa, Arkhave, Vitse, and others. The Pontus range, as it recedes from the sea-coast, rapidly rises to an altitude of 6,000 feet, and in the high lands of the Murgul its height reaches 10,486 feet (Kukurd-Dagh peak). From this summit the boundary-line runs along a lofty spur of the Pontus range, which overhangs the Chorokh river just below the town of Artvin. The peaks of the Pontus range are the following: Khvahid, 10,374 feet, Didubedagh, 10,556 feet, Dambla-Kurun, 8,827 feet, and Mersuan, 5,162 feet. From the last-mentioned of these the boundary descends along a spur to the river Chorokh, which it crosses below the village of Orjohi. The length of the frontier-line from the shores of the Black Sea to the

- <sup>2</sup> All the frontier surveys and the preparation of the maps were carried out under the immediate superintendence of Major-General Stebnitski, Chief of the Military Topographical Section of the Caucasus Staff.—AUTHOR.
- <sup>2</sup> Under the name of Pontus is to be understood that lofty range which extends for a distance of 400 versts (266‡ miles) from the lower course of the river Yeshil-Irmak, in the neighbourhood of the towns of Samsung and Niksar, to the mouth of the Chorokh river in the Black Sea (near the Karashalvar peak, 5,014 ft. above the sea). The range to which this peak belongs divides the rivers which fall directly into the Black Sea from the affluents of the rivers Yeshil-Irmak, Kizil-Irmak and Chorokh. The highest point of this range is Mount Varsaubeg, within the parallels of 40° 43′ N.L. and 58° 36′ E.L. It rises to a height of 12,152 feet, according to trigonometrical determination. The range principally consists of volcanic strata.—Author.

river Chorokh equals 89½ versts (59¾ miles). Through this extent twenty-three boundary pillars have been erected.¹ From the portion of the boundary-line above indicated there lead into Turkish territory several difficult pack-roads, the best of which are the following: from the village of Borchka through Chkal Gorge into that of the river Khopa; from the Mugul Gorge towards Arkhave over the Parekh Pass; and from the Melo Gorge towards the town of Artvin. The rest are mere tracks over the mountains.

From the Chorokh river the boundary-line rises to Mount Kheirat, crosses the gorges of the rivers Khizor and Khod-Yelia, runs along the range at a height of about 8,000 feet (i.e., over the tops of Beyuk-Sirta, 8,704 feet, Asamal, Kurush-Bashi, 8,162 feet, and others), and descends to the gorge of the river Olta-Chai at the village of Khosor. Thence the boundary-line again follows the mountains (passing over the summits of Gumekhrek Urgan-Duza, 8,064 feet, Zivin, 9,436 feet, Kizil-Aarin, 7,644 feet, Liansh-Dagh, 8,316 feet, Sogul-Dagh, 7,896 feet, and others), whence it descends to the Sevri-Chai, which is distant from the town of Olta 5\frac{3}{8} versts (3\frac{6}{8} miles). Beyond this point the boundary-line runs along the range, passing near the village of Noriman and going as far as the Kala-Bugaz natural gates, through which the Olta-Chai makes its way.

That portion of the boundary-line from the river Chorokh to the Kala-Bugaz Pass, where the pillar No. 13 is set up, has a general direction from north to south, and covers an extent of 101 versts (671 miles). Within this stretch the more important of the roads leading from Russian into Turkish territory are the following: along the lower course of the Olta-Chai, from the village of Khosor on the Chorokh river to the villages of Oskha and Ashemishen; the high road from Olta along the river Sevri-Chai, and onwards through the village of Ginsk and the town of Erzerum for a distance of 99 versts (66 miles); the road (and the best of all) from the town of Olta through Noriman and Akriak; another to Hassan Kala and Erzerum (direct to Erzerum through Ginsk the distance is 104 versts, 691 miles, and through the town of Hassan-Kala the distance is 107 versts, 701 miles). From pillar No. 73 the boundary-line turns eastwards with a slight inclination to north, and passes over a series of peaks and along a portion of the Dumbuli-Deresi stream. It then rises to the highlands of Chikmash-Tash-Tapa at the point where the rivers Dumbuli-Deresi and the Kardus-Chai unite. Here pillar No. 103 has been set up. Further on the boundary-line runs for a distance of 13 versts (8% miles) along the river Bardus-Chai, and on the bank of this river stands pillar No. 107. Thence the boundary-

1 Stone boundary pillars, about 8½ feet high and upwards, are set in lime-mortar and are put up on the ranges at all the turnings of the line, on passes marked by pack roads, on footpaths, and wherever necessary to clearly indicate the boundary. In places where the ranges are wooded a cutting has been made 21 feet wide.—Author.

line follows the mountain range, passing over the peaks of Chilkharoff, 7,093 feet, Chakir-Baba, 8,025 feet, Gelya, 8,990 feet. It then descends in a westerly direction near the village of Karaurgan, 4 versts (2<sup>2</sup>/<sub>3</sub> miles) from the village of Zivin (Turkish), and here pillars Nos. 132 and 0 have been erected. The distance from Kala-Bugaz (the Noriman gates) to the Karaurgan pillar is 72 versts (48 miles). In the neighbourhood of the villages of Bardus and Karaurgan, roads lead from the town of Kars by a descent from the Saganlug range to the towns of Hassan-Kala and Erzerum, but the longest and most practicable road leads through the villages of Karaurgan and Zivin. The length of this road from the Russo-Turkish frontier to the town of Erzerum measures 93 versts (62 miles). The road over the Bardus Pass is difficult, especially in the winter season of the year, because of the snowdrifts. Further on the boundary-line runs in rather a disconnected way between the villages of Upper Menjigert (Russian) and Lower Menjigert (Turkish) to the river Arax, on the bank of which pillar No. 8 has been set up. The boundary runs for a distance of 3½ versts (2½ miles) along the Arax, whence it winds up to pillar No. 17 on the line of the great water-parting between the Eastern Euphrates, the Murad-Chai, and the Arax. tance from pillar No. 0 at the village of Karaurgan to pillar No. 17 is 60% versts (40% miles). Within this stretch there leave Russian territory the following roads: a wheel-road from Kars over the Meliduz Pass in the Saganlug range. This road, after descending to the village of Upper Menjigert, passes the village of Lower Menjigert to the river Arax, and beyond it to the village of Khorosan where its strikes into the great Kars-Erzerum road. From the river Arax another road goes as far as the village of Dali-Baba, and thence joins the great Erzerum-Alashkert road. Besides these, the following cross the frontier: a road from the village of Karakurt to the village of Kara-Kilis and Yuz-Veran (Turkish) which unites with the great Erzerum road at the village of Kerpikei; a road from the village of Bash-Kei to Kara-Killis and beyond.

From pillar No. 17 the frontier-line runs along the range above named, over the Mulla-Osman Pass, 9,667 feet, Baz-Dagh, 9,598 feet, and Chukur-Chash, 9,254 feet, to the Tandurak (Takaurek) Mountains, 8,463 feet, where pillar No. 22 has been erected. At this point the present boundary-line merges with that which marked the Russo-Turkish frontier up to the period of the last war, i.e., the boundary agreed to by the Adrianople Treaty of 1829, and confirmed by the Treaty of Paris of 1857. The portion of the new frontier between pillars 17 and 22 has a length of  $60\frac{3}{4}$  versts  $(40\frac{1}{2}$  miles). Within this stretch, besides indifferent pack-roads leading from Russian into Turkish limits, the most practicable, but as yet unmade, road runs over the Khopusski Pass (about 8,000 feet) from the village of Armutlu to the village of Alashkert. Without previous preparation the ascent to the

57.

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Khopusski Pass could not be effected by an army furnished with a transport-train and with artillery. Further on the new frontier-line runs along the Agri-Dagh range, which serves as the water-parting between Lake Balik-Gol and the affluents of the Arax, and then runs into the system of the Greater and Lesser Ararat. Beginning at pillar No. 22 there are the following peaks on the Agri-Dagh range: Sanak-Bashi, 9,198 feet; Sulkha-Dagh, 9,644 feet; Sitchanni, 9,241 feet: Pass of Karavan-Serai, 7,245 feet; Akhbulak Pass, 8,344 feet; Mount Chingil, 10,640 feet; the Chingil Pass, 6,881 feet. Further on rises up the summit of the Greater Ararat to a height of 16,916 feet. The Russo-Turkish frontier-line comes to an end with the range that unites Greater and Lesser Ararat. At a distance of 9½ versts (6½ miles) from the former, on a spot called Sardar-Bulak-Getjidi, the frontier pillar No. 37 has been erected. From this begins the Russo-Persian frontier, the Perso-Turkish boundary-line running almost at right angles to it and bearing south. The extent of the last portion of the Russo-Turkish frontier-line, from Mount Tandurak eastwards, covers a distance of 132½ versts (88½ miles). In the eastern half of this stretch there are wheel-roads into Turkish territory over the Chingil Pass (6,881 feet), Akh-Bulak (8,344 feet), Karavan-Serai (7,245 feet), and the Aslanlin Pass (7,805 feet). The road over the pass last mentioned requires repair. During the war of 1877-1878 both Russian and Turkish troops made use of these passes. The total length of the Russo-Turkish frontier, from the shores of the Black Sea to the point between the Greater and the Lesser Ararat, amounts to 521\frac{3}{2} versts (347\frac{1}{2} \text{ miles}); that of the frontier-line which existed prior to the last war extended from St. Nicholas, near the mouth of the Cholok river in the Black Sea, to the same point eastwards, so that its total length amounted to 589 versts (392% miles). Thus the new Russo-Turkish frontier-line is shorter than the preceding one by 67½ versts (445 miles), but by the new treaty Russia has acquired fresh territory on the Black Sea, viz., from the mouth of the Cholok river to Cape Kompush, 57 versts (38 miles). The territory ceded to Russia by the Treaty of Berlin is as follows: the province of Batoum, with an area of 6.031 square versts, or 124.6 square miles; the province of Kars, with an area of 16.299 square versts, or 336.8 square miles, giving a total of 22:330 square versts, or 461:4 square miles.

Let us now compare the present Russo-Turkish line of frontier with the former one. Prior to the outbreak of the last war, the most convenient port on the east coast of the Black Sea, Batoum, was within Turkish limits, and distant some hours' voyage from the existing line of frontier. As we had no port at Poti, almost all our vessels had of necessity to make use of the anchorage offered at Batoum, and this was especially the case during the winter season. In peace time Batoum was a contraband depot, and owing to Turkish protection and to our

having no naval customs service, such contraband goods could easily be conveyed along the coasts of Georgia and Mingrelia into the heart of Trans-Caucasus, and through Ajaria to the trading town of Akhaltsikh. On the other hand, in time of war Batoum served as a place d'armes at which the Turkish troops collected, and whence, owing to our having insufficient ships of war in the Black Sea, they could easily be thrown into Sukhum or other points wherein they could prevent Lazistan from being invaded, and if occasion offered, proceed up the Cholok river into Georgia (as they did in the Crimean War). Therefore the possession of Batoum involved for us great economic and military advantages. Although the Turkish port of Trebizond is only eight hours' sail from the present frontier-line, it is far from affording to the Turks the same conveniences that Batoum used to do. The former line of frontier along the Cholok was perfectly open, and, indeed, easy for Turkish inroads. This circumstance compelled us, on the occasion of each of our wars with Turkey, to keep in the neighbourhood a considerable force, which was altogether separated from our army of operations, and to which, in an active sense, it was a very difficult problem to acquire the Tsikhedzir positions. Now, however, from the sea-coast to the course of the Chorok river the frontier-line presents throughout a compact wall, rising like a lofty Alpine range, which has scarcely any practicable roads across it, and for the defence of which a small body of troops would suffice. The Kars plateau on the Turkish side is flanked by the Saganlug range, and all the passes of this range lead into Russian territory, whilst the upper portions of the western descents from the same range lie in Upper Anatolia. position of the new frontier would give us very important strategical advantages in the event of military operations in connection with Asiatic Turkey. The whole of the vast tract of the Suganlug forest land—the only large forest in Upper Anatolia—is within Russian limits. The rest of the frontier-line lies along a lofty and unbroken mountain range which rises up between the rivers Arax and Eastern Euphrates, and in the eastern portion of this range alone are three practicable roads from the Bayazid side into the Erivan Government. We will here remark that the former frontier-line had two important defects. One of these was the vast re-entering angle turned towards the Akhalkalak plateau and the river Arpachai, and the other lay in the fact that the right bank of this river is more than eighty-four feet above the level of Fort Alexandropol.

The new Russo-Turkish frontier completely rounds off Russian territory in Asia Minor, but the newly-acquired possessions require not a little labour and care on the part of our Government, in view to their consolidation by introducing regular economic order amongst the people, and by encouraging fresh settlers.

## SUAKIN AND ITS DEFENCES.

(Compiled from official and other sources.)



UAKIN is the principal port on the Red Sea for all merchandise from the Nile provinces. It was formerly held directly subject to Turkey, but in 1865 was for a consideration handed over to the Viceroy of Egypt.

Though formed by nature to serve as a harbour for the Egyptian Soudan and even for Abyssinia, as long as its administration was under Arabia and Constantinople, it could never rise, and its prosperity now is only comparative. The Egyptian Government still obstructs traffic by the heavy duties which it levies on the natural intercourse with Suez. The Government preferred Massuah as a harbour, although the latter is twice as far from Khartoum as Suakin is from Berber, and the trade from the Nile viâ Berber was never interrupted until Osman Digma threw the country into disorder.

Suakin is situated in lat. 19° 17′ N. and long. 37° 20′ E. It consists of the town proper, built on an island, and of a suburb on the mainland, which has outgrown the town both in population and importance. It contains a number of mosques and public buildings: of which the principal are the Governor's house, the Custom-house, and the bazaar.

The inner harbour is formed by a channel 500 yards wide, which penetrates between the mainland and two islands, on one of which the town is built. Although completely sheltered from all winds, it is too shallow to admit the largest vessels.

These two islands are situated in a lagoon or bay, which is connected with the sea by a neck of water about three-quarters of a mile long and just wide enough to admit of two ships passing. In this bay, outside the islands, there is water deep enough for ocean-going steamers.

The entrance to the harbour is difficult and can only be approached by daylight, as there are dangerous coral reefs lying off the coast for twenty miles both north and south. These reefs are not buoyed, and lie only a few feet below the surface. The harbour though small is very secure.

Up to 1884 the town was practically undefended, for although two small field guns commanded the causeway built by Colonel Gordon, connecting the town with the mainland, yet the channel along one side of the town is so narrow that an attacking force could have easily waded across it, and the town could also have been easily bombarded from the sea.

The garrison formerly consisted of about 300 Nubian troops stationed in an open barrack on the mainland, about a mile from the town. The Governor of the place was

under the orders of the Governor of the Red Sea ports who had his official residence at Massuah.

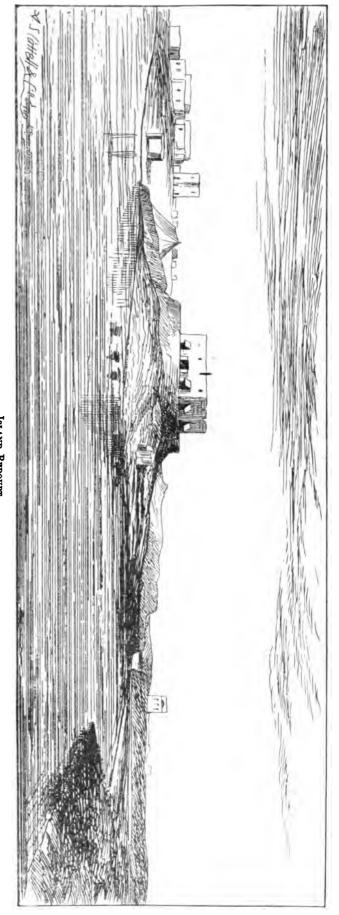
The water-supply was always limited. It is collected during the wet season in a large reservoir about a mile from the town, where there are also a few wells. Towards the end of the dry season all this water becomes thick and dark coloured, but it is said not to be unwholesome. This, however, is a matter of opinion. Cattle and sheep are plentiful and cheap in peace time: obtained from the neighbouring tribes, who export hundreds of them annually to Suez. Camels also could be bought or hired in great numbers at all seasons, but especially in summer, before they went inland to bring down gum arabic from the interior. Mules, horses, or donkeys were not to be had.

There is a telegraph line to Kassala and, vid Khartoum, to Cairo.

When there is no quarantine at the Arabian ports to interfere with the Red Sea steamers, there is a weekly service to and from Suez by one or other of the Egyptian Line or Khedive steamers, the British-India Steam Navigation ships, the Rubattino Company's steamers, or the Levant and Eastern Steamship Company's vessels.

The derivation of Suakin or Suakim (for it is spelt both ways) is curious. In the language of the country it is called Sowagin-meaning "Together with the 'jinn' or spirit." The story told in tradition is that once upon a time seven virgins lived upon an island in the Red Sea. upon which no man or other human being ever trod. The virgins were alone "in maiden meditation, fancy free," until one day some fishermen were driven upon the coast, and, landing from their boats, found the seven ladies. and found also that they were all enceinte. Their explanation-which was never questioned-was that they had been visited by the jinns, or spirits, from another world, and that the children that were to be born had a great destiny before them. This was to colonise the mainland and found Suakin. This they did, and the present inhabitants claim to be descended from the "spirits" and these wise or foolish virgins as antiquarians or moralists may consider

Few travellers have considered the place worthy of much notice. When Captain Speedy visited it in 1878 the causeway, afterwards built by Gordon, had not been made, and the journey to the mainland had to be performed in boats. Mrs. Speedy, in her chatty story of her and her husband's wanderings in the Soudan, describes the town as a quiet, quaint little Arab seaport, with a couple of mosques, a small fort, and a fine old gateway. The chief house was the Pasha's, which was a mansion composed of



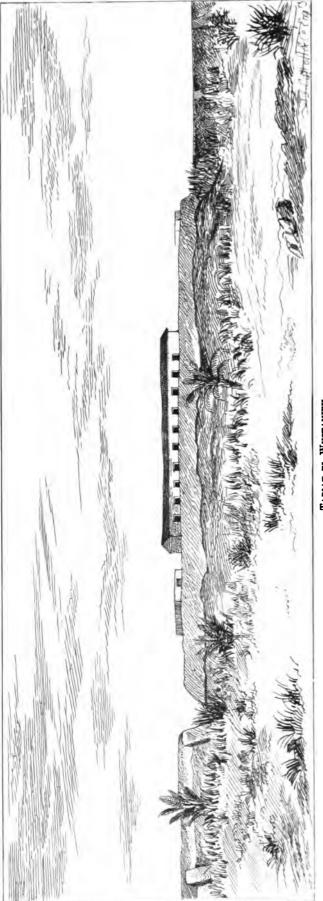
ISLAND REDOUBT.

Coral-stone house, surrounded by mud wall. Garrisoned by Egyptians with one Gatling gun.

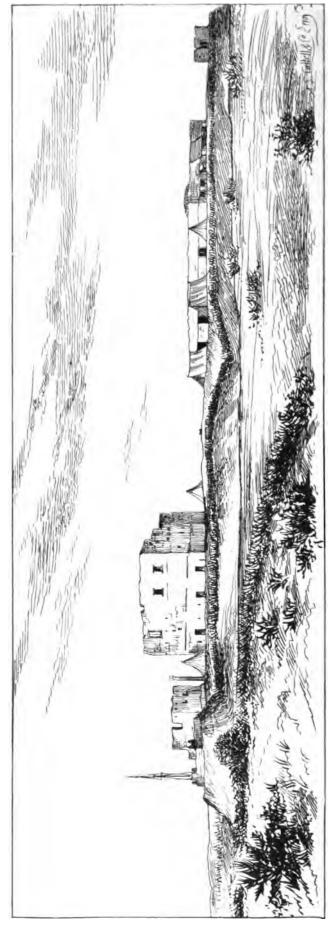


TABIAT EL ANSARI.

Coral-stone houses, surrounded by mud wall and ditch, with zeroba of mimosa bushes. Garrisoned by one company of Egyptians with one Gatling gun, one Krupp gun, and one mountain gun.



TABIAT EL WUSTANIEH.
Coral stone house, surrounded by mud wall and ditch. Garrisoned by company of Egyptians.



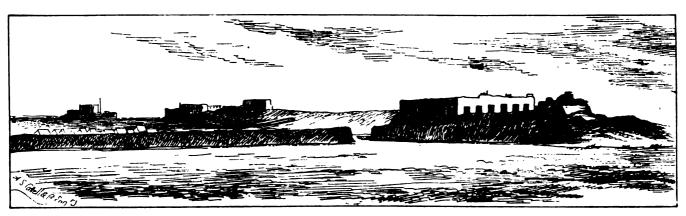
FORTS CARYSFORT AND EURYALUS.

Coral-stone houses, fortified, surrounded by mud wall and ditch, and by zereba of mimosa bushes. Gerrisoned by Royal Marines and one company of Egyptians with one Fronch gun, two Gatling guns, one mountain gun, and one Krupp gun. Electric light is placed in the largest fort.

mud walls covered with a sort of whitewash stucco both inside and out. The roughest of unhewn beams, with matting, in which there were mighty gaps, stretched over them, formed the ceiling. The windows were badly made venetians, through which (this was in February) the cold wind from the sea blew cruelly. But the same place in July was intolerable from the heat, which, though not so intensely burning as the inland heat, was far more unpleasant owing to its dampness, the atmosphere being filled with steaming moisture. Fresh water was then scarce, every drop for drinking or bathing purposes having to be bought. Hot as the days were, the nights were almost more intolerable, owing to the presence of myriads of the tiniest imaginable gnats, things hardly bigger than needle points, but which swarmed around, and, penetrating deep into the skin, gave excruciating pain. All known antidotes failed to have any effect against these minute monsters; only the coming of daylight dispersed them. in which waves a mass of delicate algae, amidst the filaments of which dart shoals of small silvery fish. On the inner shore grow thickets of the Avicennia officinalis, the green laurel leaves of which contrast sharply with the sea and the desert on either hand.

"The outer edge of the reef, upon which the surf beats and gurgles in the coral caverns and abysses, with which it is honeycombed, is fringed with rounded masses of meandran coral with its brain-like convolutions and yellow, bluish, or rose coloured madrepore. Fringed and carpeted with seaweed of a bright blue tint as seen through the water, among which flash and gleam fish, whose hues—silver, gold, and azure—rival those of tropical birds, this region seems a sea paradise. From such caverns the sirens of old might have lured the mariner to his destruction. It is the sea of *The Tempest* and of the imagination of our childhood.

" In the inner portion of the coral zone grow the delicate



TABIAT EL YEMIN.

Coral-stone house, surrounded by mud wall. Garrisoned by company of Egyptians with one Krupp gun and two mountain guns.

Mrs. Speedy thought Suakin "picturesque" notwithstanding, but she mentions that a few days' experience of it was "more than sufficient."

Colonel Colborne, who was saved by illness from the destruction which met Hicks Pasha's army, but who succumbed at length to the fever of the Soudan, was at Suakin with General Hicks in February, 1883. He describes the approach to it as a dangerous threading of a way through twenty miles of coral girt channel which led to the land-locked harbour. Suakin itself was a glittering white town, built of madrepore, on an island, the houses looking at a distance like the pierced walls of a fortress, giving it a mediæval and castellated appearance, with a middle distance of level plain backed by the serrated mountain ranges of the Nubian desert. The shores are described as being replete with interest for the sightseer and naturalist. There is a double shore—the inner one being the true land and the outer one a surf-beaten coral zone. At ebb-tide the reef is a network of lagunes made by the depressions which the tide leaves, filled with water

branches of the *stylaphora* coral, the lovely cup star, and a wealth of sea urchins, anemones, star-fish, and medusæ. Not the least curious among this strange development of life is the strange sea-cucumber. These *kalanæ*, as the natives call the rock pools, are Nature's curiosity shops, where she seems to have gathered together her strangest and most fantastic creations."

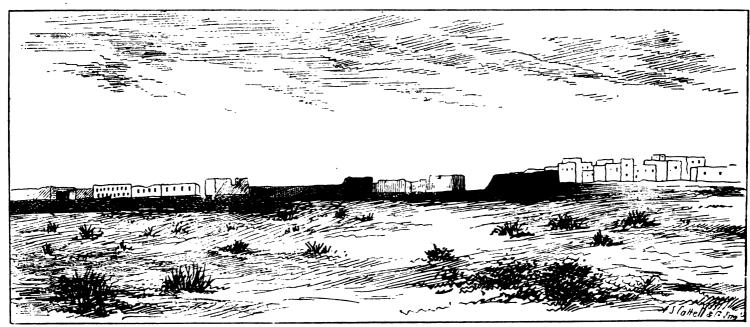
So far as the human dwellings went they appeared to Colonel Colborne to be much in the same condition as when the Speedys saw them. The Pasha's apartments were in various stages of decay, their dilapidated appearance generally bearing a ratio to their size. "The atmosphere was redolent of departed glories—and of rats."

At that time the Governor of Suakin had no means of firing even a salute, except from an old worn-out gun, but he did his best to receive Hicks Pasha with military honours, which consisted of the blowing on trumpets of the Khedival hymn—said to have been composed by Verdi—a combination of Oriental with European music, which has been described as "execrable."

Over the gateway leading to the Governor's palace the Englishmen were surprised at seeing a great yellow wooden lion. Inquiring if this was the emblem of the Soudan as well as of England, they were informed that it was nothing more than the figure-head of a ship called the Lion, which figure-head an æsthetical Pasha had placed over the gateway with no, then, thought of heraldic significance.

But it signifies much to-day, and the Arab interprets the meaning of it in his own way. The "infidel" has taken possession of Suakin, and would keep it if he can. To the credit of Arab courage and persistent daring it may be said that the task to do so has not been an easy one. The hitherto almost insignificant seaport, which was chiefly used some years ago for the exportation of slaves, has, within a brief period, sprung up into a place of military importance to England.

capital of the Soudan would have been reached in six days instead of from fifteen to twenty, the time now taken by the desert route and river. Dromedaries, if swift, do the distance from Suakin to Berber in from eight to ten days, but fifteen is the average. Nothing, however, was done about the railway scheme except surveys being taken in 1865 and 1871. In 1873 a line was commenced at Wadi Halfa, but in 1877, after an expenditure of about half a million sterling and the completion of about fifty miles southward, the work was stopped for financial reasons-The southern terminus of this line was to be at Shendy, as the most convenient centre for all traffic by the Nile and above which the river is more or less navigable. In 1878, when Gordon was Governor-General of the Soudan, he recommended the formation of the line between Suakin and Berber, that being the natural outlet for the Soudan trade:



SPHINX GATE. One Gatling gun.

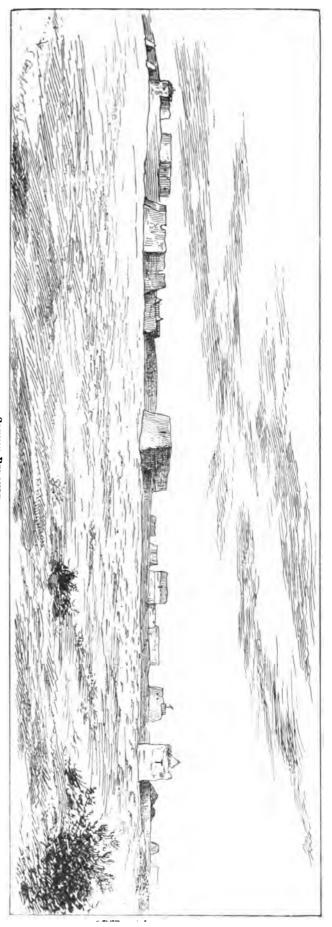
CAMEL POST One mountain gun.

LEFT REDOUBT. One French rifled gun. Coral-stone houses, protected by mud wall on outside. Garrisoned by Egyptians.

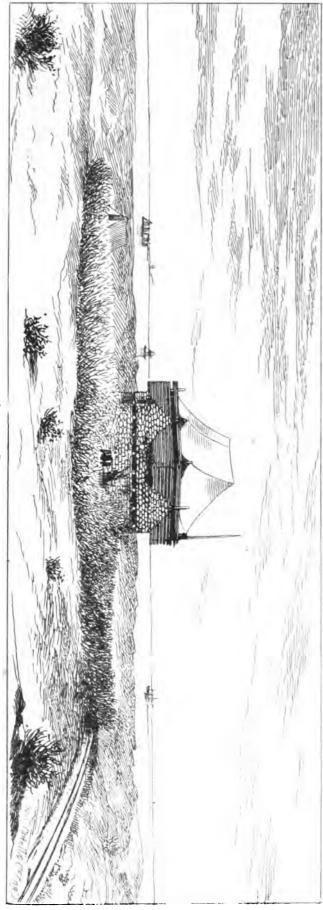
The prohibition against the exportation of slaves, deprived Suakin of its chief industry for several years, but the slave dealers always clung to the hope that the zeal against this traffic, displayed by Gordon, Baker, and other representatives of, to them, incomprehensible European ideas of freedom, was only temporary, and many attempts were made to renew the trade under the pretence of carrying out objects of legitimate commerce. Italian and a few English merchants established agencies for the purchase of guns, senna, ostrich feathers, &c., and an enterprising Frenchman erected a ginning house for the preparation of cotton grown within fifteen leagues. A railway was also planned from Suakin to Berber, the Nile port which communicates with Khartoum. Had this work been carried out when first projected by Said Pasha in 1860, the

the Nile railway idea he considered visionary. posal was to utilise the river, where navigable, for small steamers, and to lay tramways in the intervening spaces. The Egyptian authorities did, as usual, nothing in the matter, and so the long projected railway scheme remained in abeyance until the present time.

In August, 1877, a convention was concluded between Great Britain and Egypt, by which all public traffic in slaves was at once prohibited, while the private trade in Egypt was to be suppressed in 1884 and in the Soudan in 1889. It was, however, then pointed out to the English Government, that if the threatened liberation of the slaves took place in 1884, there would be a revolt of the whole country, as the revenue at Cairo would fall to one-half and the country would require more troops to keep it quiet.

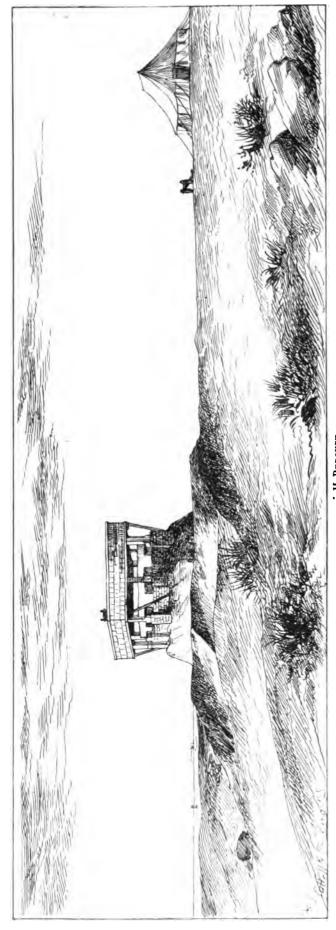


Coral stone houses, fortified, and protected by mud wall on outside. Garrisoned by Royal Marines with two Gatling guns and one Krupp gun. SPHINX REDOUBT.

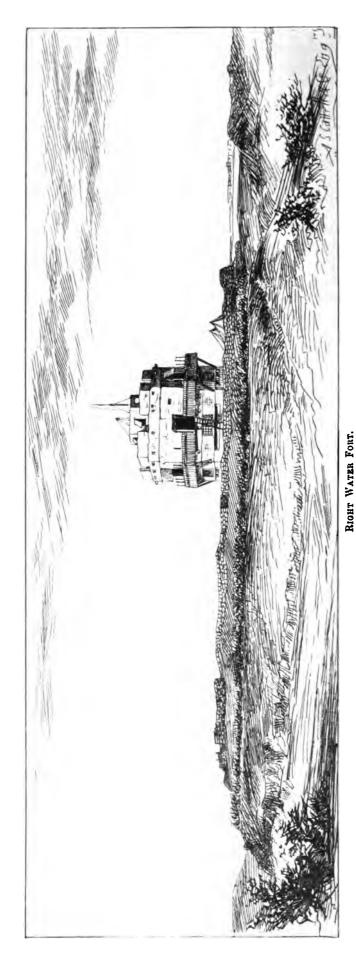


SAND-BAG REDOUBT.

Built of sand-bags, with upper portion of tent for roof. Surrounded by ditch and zereba of mimosa bushes. Railway runs 400 yards beyond redoubt. Garrisoned by Royal Marines with one Krupp gun, one French gun, one mountain gun, and one Gatling gun. Constructed by natives in twelve hours.



Small redoubt built of solid cement and railway irons, surrounded by ditch. Earthwork in front for Krupp gun. Garrisoned by men of the Royal Marines with one French gun and one Gatling gun. Took five weeks to build. A strong little fort. . H REDOUBT.

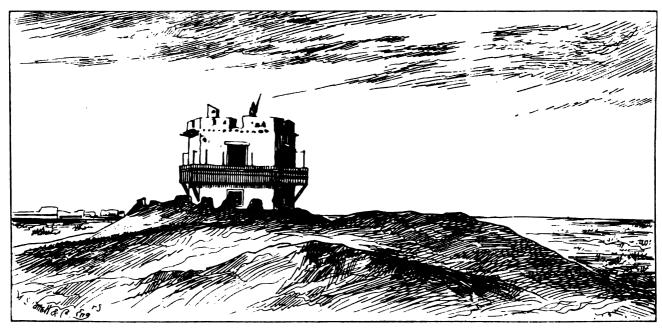


Built of coral-stone on rising earth, surrounded by stone wall and zereba of mimosa bushes. Carrisoned by fifty Royal Marines with one French gun, one Krupp gun, and one Catling gun.

The campaign against the slave dealers, was, nevertheless, vigorously pushed on, without any consideration of political consequences, although the Dual Control had full warning of what might be expected in the Soudan, where seveneighths of the population were slaves and the slave-dealers all powerful. These latter had made arrangements to stir up a vast insurrection and to apportion the provinces of the Soudan amongst themselves, and they even gave out that they would not stop short of Cairo. Informed of this Gordon wrote:—"There is no doubt that if the Governments of France and England do not pay more attention to the Soudan, if they do not establish at Khartoum a branch of mixed tribunals, and see that justice is done, the disruption of the Soudan from Cairo is only a question of time. This disruption, moreover, will not end the troubles, for the Soudanese through their allies in Lower Egypt—the

creed of Mohammed had long had a peculiar fascination for the natives of Central Africa, and now when a prophet arose who, besides declaring a divine mission, proclaimed as his doctrines universal equality with a community of goods, thousands flocked to his standard. There were other inducements too. The venality of the Egyptian officials, and the oppressive manner of collecting the taxes; the military weakness of the government, and the suppression of the slave trade, to which the most powerful of the tribes owed their wealth, made revolt tempting. The Mahdi took the field and the story of his defeats and successes is a matter of present history.

The crushing of Arabi Pasha and the brilliancy of the victories, which culminated with that of Tel-el-Kebir, have not helped to the pacification of the Soudan. Suakin's commercial importance has been lost in the



FORT FOULAH.

Built of coral-stone, on mound, with broken bottles on top of mound. Garrisoned by Egyptians with one Krupp gun and one mountain gun. The entire work was completed in seven days.

black soldiers I mean—will carry on their efforts in Cairo itself. Now these black soldiers are the only troops in the Egyptian service worth anything." This was written in 1878. Revolts and massacres quickly followed, but in April, 1882, the slave trade was declared to have been successfully stamped out. The Soudan was re-organised (on paper)—agriculture was to be encouraged—trade to be revived—and schools and seats of justice were to be established. Suakin was to become a flourishing commercial port for legitimate commerce.

But a little cloud had gathered on the political horizon a few months previously. A sheik named Mohammed Ahmed—the son of a Dongola carpenter—proclaimed himself as the prophet, foretold by Mohammed, who was to regenerate and gather together the forces of Islam. The

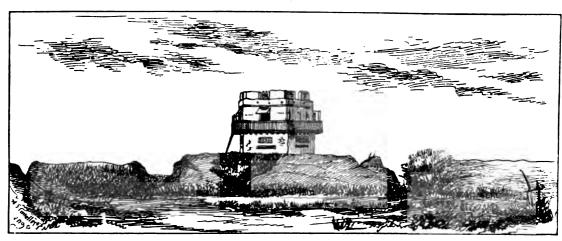
necessity which has made it the base of military operations, which are still being carried on. Hitherto its name and those of the places in its near vicinity have not been associated with successes of which England can make much boast, except as regards the courage and endurance of her individual soldiery. From this base the ill-fated expedition under Hicks Pasha started for-annihilation; from it Baker Pasha went out to meet—overwhelming defeat; in its vicinity General Graham had, a year ago, won with difficulty a doubtful and resultless victory, and but yesterday, almost, M'Neill, within a few miles of the town, was saved from disaster only by the magnificent conduct Suakin has been always a difficult and of his men. dangerous situation to hold in the presence of the daring and fanatical Bisharin and Hadendoah Arabs, who occupy the adjoining mainland. But, until the arrival of the second expedition under General Graham, it was allowed to remain undefended by any military works and might have been carried by a coup de main at any time by a determined enemy. This is now fortunately not possible, and our engineers have thrown up a system of protective defences, displaying considerable skill and excellent workmanship, under many discouragements. We are enabled to present our readers with drawings taken upon the spot of the forts around these defences. A careful examination of these will well repay the military student, conveying as they do most valuable lessons in the way of extemporising fortifications in the field under exceptional circumstances of difficulty and necessity.

The sketches are taken from outside the walls looking direct into the town.

Redoubt, and Fort Foulah. Away to the extreme northwest, for the defence of the railway, is the Sand-bag Redoubt, and closer in, also for the railway defence, is H Redoubt. To the westward of the town are the Right and Left Water Forts, connected by a covered way.

Two carefully constructed outside works guard the wells to the south-west at the foot of the ground, which from this point gently rises towards the hills some eight or nine miles distant.

The sketches which we have been enabled to reproduce are very accurate, and include all the principal works employed in the defence, with the exception of a tower built recently to the south of the harbour to command some quarries, which, affording excellent shelter, used to be occupied by the enemy for the purpose of firing into the town and at the ships at short range.



LEFT WATER FORT.

Built of coral-stone, on mound, surrounded by zereba of mimosa bushes and broken glass. Garrisoned by Egyptians with one French gun, one mountain gun, and one Gatling gun.

On entering the harbour from the sea, a very difficult channel has to be traversed, but careful soundings have been laid down on the charts and several beacons have been erected. On the right, before reaching the town, there is a small island called "Quarantine Island," on which are the Royal Engineer and Naval and Transport camps, and from which the railway starts over a built causeway to the main-It is protected by two redoubts, one to the immediate west of the island and the other some distance to the north-west. A very comprehensive cordon of works defends the town itself on the land side, running from north-west to south-east. The first of these-after the Island Redoubt—is the Tabiat el Yemin redoubt, which is connected to the west with the Tabiat el Ansari, from which redoubt the works are carried on to the south in the following order:—Tabiat el Wustanieh, Forts Carysfort and Euryalus, the Sphinx Fort and Camel Post and Left The walls described as mud are really stone plastered with mud.

The whole system of defence and the skilful and rapid way in which the works have been thrown up reflects the highest credit on the officers who planned and the men who executed them.

But a painful reflection intrudes. Has all this labour now been in vain? The question is prompted by the report that the British troops are to be withdrawn from the Soudan. If this be so, the lines which Swift in irony applied to his countrymen will be appropriately suggestive of the action of our Statesmen:—

GEORGE ROE FENWICK.

<sup>&</sup>quot;When nothing's left that's worth defence, They build a magazine!"

# THE OFFENSIVE AND DEFENSIVE WORK OF TORPEDOES.

Compiled from the Rivista di Artiglieria e Genio, and other sources.

THE next naval war will probably solve a great many questions, but few among them will attract more interest and attention than a practical demonstration of the value of the latest torpedo inventions. The fight between electric light, water-tight compartments, netting, machineguns, and torpedo-hunters on the one side, and the automobile and controllable torpedo on the other, is likely to be a close one. Whether the torpedo will be fatal to an enemy's ironclad, whether it will operate with greater effect on the high seas or around the coasts, in what manner, at what time, and at what range it should be discharged, are questions of vital importance which we have hitherto had little opportunity of judging. The Chili-Peruvian War was on too small a scale, and is already too out-ofdate, to afford any fair test of the efficiency of a weapon. which has since then been vastly improved. The encounter between the old steam launch the Independencia, armed with a Gardner gun and torpedoes, and the two Chilian torpedo launches Guacolda (Thornycroft) and Janequeo (Yarrow) in Callao harbour, scarcely afforded any definite conclusions. The combat resolved itself into a duel between the steam launch and the Janequeo, which was fatal to both vessels. They were simultaneously struck by torpedoes, and the Janequeo sank almost immediately The Peruvian launch survived its opponent but a short time, and its crew, finding their vessel sinking, surrendered themselves to the Guacolda. The death of both parties to a duel is scarcely less improbable than the recurrence of such a coincidence.

Recent improvements in torpedoes have rendered their employment still more dangerous, and it is now admitted that they will form one of the chief elements of both offence and defence, whether these are for ships or land.

The invention of Mr. Williams forms a great stride in torpedo construction, and threatens to neutralise the advantages claimed for water-tight compartments and electric light, whether in reference to the defence of harbours or engagements at sea by day or night. Our full page illustration shows in more or less detail his system of defending harbours against an enemy's ironclads. To the left, on a height, is a windmill containing the elements necessary for the generation of an electric current. A cable connects this mill with the fixed and floating batteries, and transmits the electric force necessary for the propulsion of the torpedoes.

As soon as the enemy's fleet come within range, they are attacked simultaneously by a vast number of torpedoes, launched from the various centres of defence, and from the two torpedo-boats shown in the illustration.

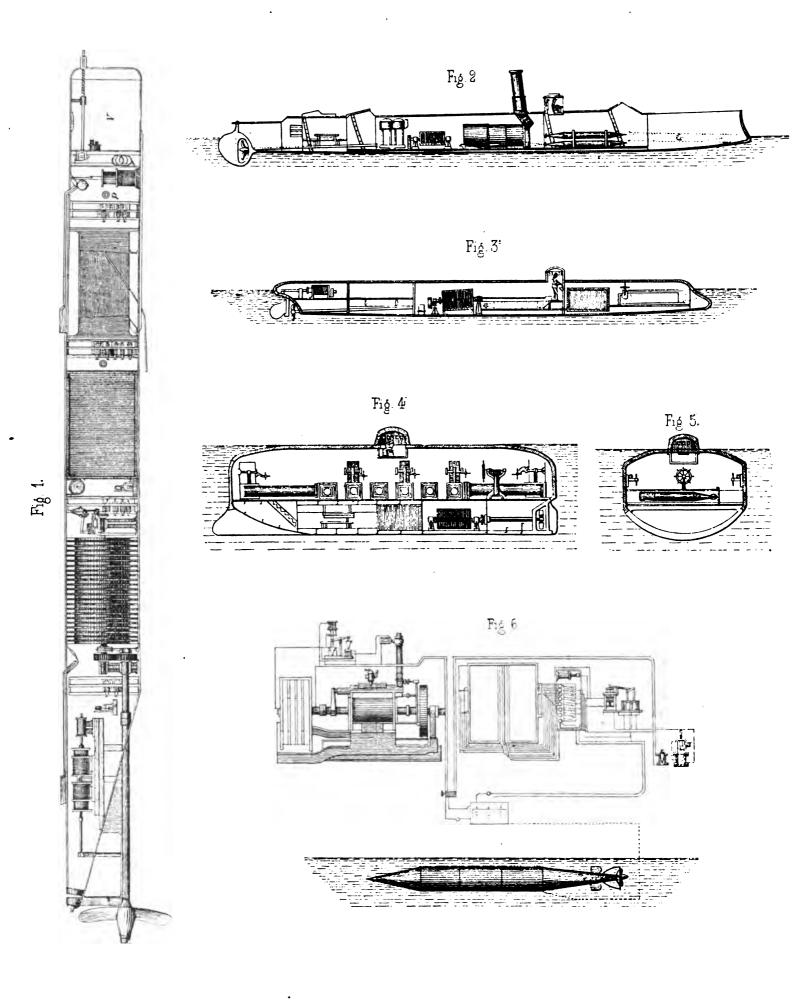
The electric current is generated either by natural or artificial means. The various stations are provided with accumulators for storing the energy transmitted. The latter are so constructed that they can supply a force which will continue to act until a fixed limit has been reached. When the accumulators are fully charged the contact is broken. A special arrangement prevents the electric current from returning to the principal station, and obviates all danger to the accumulators. The torpedo-boats can re-charge their accumulators at the floating buoy or at any of the batteries. The former, as will be seen, is supplied from one of the floating batteries, with which it is connected by a cable.

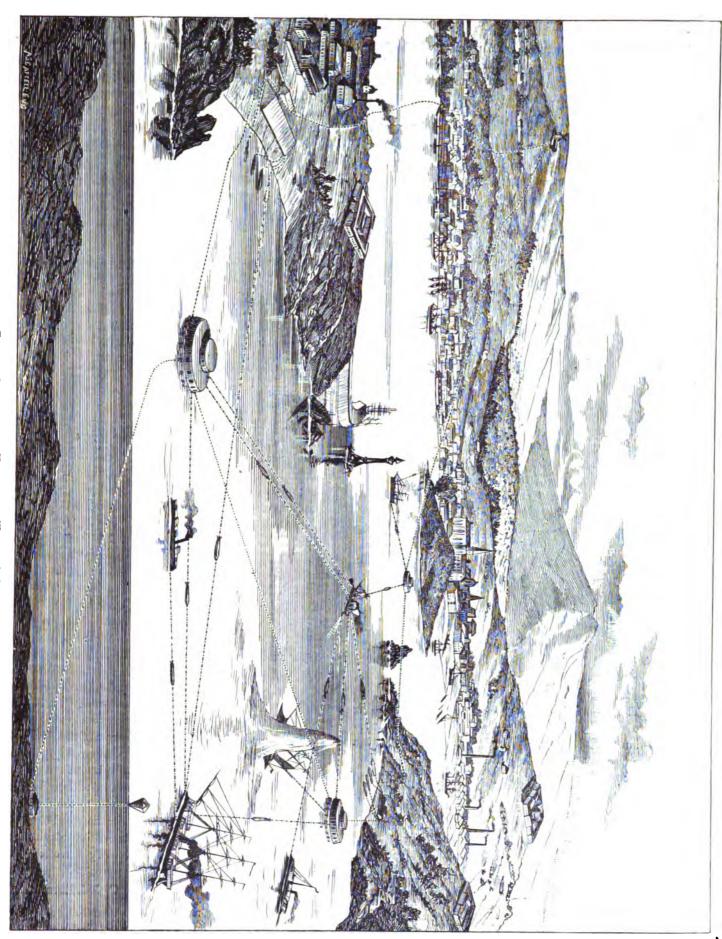
The Williams torpedo is shown in sections in Fig. 1. V is the magazine containing the charge. On striking the ship this portion is disconnected from the main body of the torpedo, and is fired by electricity. Immediately behind the magazine is the electrical apparatus P, by means of which two sight-rods can be raised or lowered at pleasure. The latter, which are provided with incandescent lamps, show the position and direction of the torpedo. By these means it can be guided in spite of unfavourable currents or any shifting on the part of the enemy's ship. Even if the enemy saw these rods, the great speed with which the torpedo moves (about twenty-five miles per hour) would prevent them from escaping its blow. In the accumulator, which comes next, a great amount of electric energy can, by Mr. Williams's process, be stored in a very small space.

Between the motor and the accumulator resistances are inserted, by means of which speed can be regulated to a nicety. The motor is composed of a series of disk-shaped armatures, insuring the generation of a very considerable force with a comparatively light weight. The mechanism for moving the rudder is also electric, and its position can be accurately ascertained at any moment from the launching base. Analogous arrangements are applicable to torpedo launches. Fig. 2 represents a launch provided with a number of torpedoes, which are discharged in the manner already indicated.

When torpedoes are not provided with accumulators, they can obtain the necessary electric force from the stations at which they are launched. Fig. 6 represents a torpedo of this description. Fig. 3 shows a torpedo steam launch fitted with a dynamo and several accumulators. Figs. 4 and 5 show the manner in which floating batteries are supplied with the necessary electricity.

What the ultimate result of such improvements may be no one can possibly conceive. If practical experiment





Torredo Defence of a Harbour by Williams's System.

fulfil theoretical expectation, the bombardment of a harbour thus protected would become a virtual impossibility. The ironclad would then be restricted to combat on the high seas, where its little adversary would be almost equally effective.

This invention would form a most important addition to the armament of the torpedo-rams which have been lately so extensively adopted. Such a weapon would double or quadruple their present strength, and in view of its adoption in this class of vessel it may be worth while to glance hastily at the history of a principle which, during the last five years, has found so much favour with the naval authorities of the world.

The first vessel that marked the transition from the ironclad proper to the torpedo-ram was probably the *Tordenskiold*, built for Denmark, after the plans of Nielsen, during the years 1879-82. This vessel possesses no ram. It is 65.5m. long, 12.8m. broad, and draws from 4.27 to 4.57m. of water. Its displacement is 2,400 tons. The armament consists principally of Krupp guns of 35.5cm. Its chief strength lies in its torpedoes and two torpedo-boats.

The first real torpedo-rams were built in 1880-81, by Armstrong and Co., for the Chinese Government. They were constructed of steel, measured 64m. in length, and 10m. in breadth. They drew 4.6m. of water and had a displacement of 1,350 tons. The engines of the one, the *Tschas jung* indicated 2,677 H.P., those of the other, the *Jang-wej* 2,580 H.P. In experimental trips the speed of the vessels were found to be 16.8 and 16.2 knots respectively. They are armed with two 26-ton Armstrong breechloaders, and a number of machine guns.

The success of these vessels caused the Chili Government to commission the same firm to build them two similar ships, the Esmeralda and Arturo Pratt. The latter was christened by the President, but was afterwards bought by Japan and renamed the Tsukuschi. Esmeralda, which was lately finished, is but an improved Tschas-jung. It is 82.3m. long, 12.8m. broad, draws 5.6m. of water, and has a displacement of 2,900 tons. The engines indicate 6,000 H.P., and give a speed of 18:28 The vessel cost 165,000*l*. The armament is similar to that of the Chinese vessel. The Japanese torpedo-ram Tsukuschi has a speed of 16.8 knots, with a horse-power of 2,887. It was finished in 1883. Two more of these vessels have been ordered by Japan of Armstrong and Co., and one of the French firm Forges et Chautiers, of Toulon.

China was not content with the two vessels abovementioned. Another was finished in Stellin in 1883; and two more of Chinese manufacture were probably destroyed in the bombardment of Fu-tschu. The number of Chinese torpedo-rams was probably ten, but their fate is now uncertain. The oldest European torpedo-ram is the Sfax, built, in the years 1881-84, by the French Government. It is 83.4 m. long 15m. broad, and has 4,488 tons burden and a horse-power of from 5,000 to 7,500, giving a speed of from fifteen to sixteen knots. Its price was probably considerably over six millions of francs.

Italy has adopted the idea of torpedo-rams even more thoroughly than France. On the 15th August, 1882, a contract was entered into with Armstrong and Co. for the torpedo ram Giovanni Bausan, which was to cost four and a half millions of francs. It was delivered to the Italian Government in 1883. It is 90.92m. long, 12.80m. broad and has over 3,000 tons burden. Two compound engines drive twin screws, and indicate together a horse-power of 5,500, giving a speed of from seventeen to eighteen knots. The armament consists of two twenty-six-ton Armstrong and several machine guns. At the commencement of last year a similar vessel, the Etna, was built for the Italian Government in Castellamare. Another, the Stromboli, is to be ready at the end of this year, while a third, the Vesuvius, is to be complete in June 1886. These vessels are to be built in Italy.

In St. Petersburg two torpedo rams are in course of construction for the Russian Government. They are to be ready for commission in June and September of the current year. They are to be 80.77m. long, 13.71m. broad, and are to draw from 4.27 to 5.27m. of water. Their tonnage will be 2,998. The speed will not exceed fifteen knots. Their crews will number 400. The price will be 1,250,000 roubles each.

Besides the Alarm and Intrepid, of 1,150 and 800 tons respectively, the United States Government have ordered four torpedo-rams of different sizes. The first, the Chicago, laid down in 1883, is very similar to the Sfax. It is 91.44m. long and 14.63m. broad. It has engines of 5000 H.P., giving a speed of sixteen knots. The crew will number 300. It is to cost about 280,000l., an enormous price for such a vessel. Two others, the Atlanta and Boston, are slightly smaller. Their speed is only fourteen knots, with a horse-power of 3,500. The fourth, the Delphin, can only by courtesy be called a torpedo-ram. It is little larger than a despatch-boat.

Austria has lately ordered a torpedo-ram of the *Esmeraldu* type from Armstrong and Co. Sweden already possesses one of 625 tons and a speed of thirteen knots.

In the face of these facts and the present serious juncture of affairs, it behaves England to increase to the utmost of her power the defective torpedo service now existing. It is however satisfactory to note that the Admiralty officials are earnestly at work in the necessary direction with reference to torpedo warfare.

C. J. L'ESTRANGE.

# EXPERIENCES OF A VOLUNTEER ADJUTANT.

BY RICHARD CLYNTON.

(Concluded.)



NLY on one other occasion can I remember anything happening of a remarkable or disagreeable nature. Whenever we could, we marched up Oxford Street to drill in Hyde Park. One day when proudly marching along, a carriage with powdered footman and coachman in wig

tried to drive through our ranks as we crossed Oxford Circus. The men to save themselves being knocked down, seized the horses by the head, and the captain of the company told the occupant of the carriage that he had no right to break through a military formation.

- "Drive on!" was the only reply shouted to the coachman.
  - "Don't let go their heads," cried the captain.
- "You're an impertinent fellow," said the man in the carriage.
  - "You have no right to break through our fours."
- "You have no right to stop us. Drive on! drive on, I tell you." But the coachman was powerless, for his horses' heads were held tightly by half a dozen volunteers. I had ridden up and taken part in the proceedings. I told the captain he was perfectly right. The occupier of the carriage was livid with rage. A mounted policeman now rode up, and the colonel had appeared upon the scene also.

"It is Prince ——" the policeman said, mentioning the name of a well-known distinguished foreigner who having lived for many years in our country should have learnt better manners.

I was so enraged that I could not help saying, I hope, loud enough to be heard by the individual concerned, "He may be a foreign prince; but he certainly is not an English gentleman. He dare not drive over soldiers in his own country I will be bound."

The colonel then ordered the men to make way, and the coachman cutting his horses, they bounded forward and the enraged foreigner was carried out of our sight down Regent Street. I expect his appetite for dinner was somewhat spoilt that night.

The officer commanding the company felt himself particularly aggrieved and wrote an official report upon the subject. The whole thing was so unjustifiable, that I begged the colonel to take the matter up. Not one of our own princes would have been guilty of such a breach of

good taste, and that a foreigner should do such a thing, though he was naturalised, was not to be borne. A strong official letter was written, and after a long and circuitous route it reached head-quarters.

Those in authority there, tried to hush the matter up, and so our colonel was sent for and was ushered into the presence of a high military official who tried to get over the difficulty by making out that every one was right.

"You see, sir," said the colonel, "my men were nearly knocked down, and might have been seriously injured."

"Just so; that was wrong on the part of Prince Fitzbürgenheim; I may say very wrong; but then, my dear colonel, you should have opened your ranks—you were wrong there."

- "But he never gave us a chance, sir."
- "Ah! there the prince was decidedly wrong; but it appears his highness was in a hurry; he was going to dinner. You see all this would have been saved if your officer had used a little judgment and made way."
  - "There was no time, sir."
- "Ah! so you said; but a little tact, my dear colonel, a little tact; so much can be done by a little tact."
- "My officer was only doing his duty, and Prince Fitzbürgenheim was rude to him; he asks for an apology."
- "My dear colonel, that is asking a little too much; you cannot ask a prince to apologise. No doubt he is consumed with regret; but we must not trouble him too much. Tell your officer he did his duty; tell him, in fact, anything you like."
  - "But his feelings, sir?"
- "Oh, damn his feelings!" exclaimed the high military official, who was getting tired of the interview. "You see, colonel, your officer was on parade; he was in the execution of his duty, and it is a most unsoldier-like thing on such occasions to let feelings interfere. Tell your officer that when once on parade he is a soldier, and a soldier never has feelings—at least he never indulges in them on parade. Discipline, my dear colonel, discipline must be upheld. In all my long career I have never known a soldier, either officer, non-commissioned officer, or man, have any feelings. Feelings indeed! A most unsoldier-like quality. I should like to have known a man in my dear old regiment—the 'Blowhards' as we were called, to have been possessed of any feelings! And we could do most things well—we could drink hard, swear hard, ay,

and fight hard. I sent for you because I think it is better always to settle these matters quietly, and now, I think, there is nothing more to be said on the subject. Orderly! Orderly! Tell Mr. —— Oh! here you are!" he said as a War-Office official entered. "I say, Pigeonhole, how the devil is it that these returns have never been put before me until they are a week old. Good day, colonel; good day to you. Tell your officer that if he wishes to be a

away with him was not extreme. The general officer did not wish to be worried about such a trivial thing. After all, it was only the volunteers that were concerned. Of course had any one been killed, or any arms or legs broken, it would have been a widely different thing, though even then, in all probability, we should have taken a leaf from the French judicature, and found extenuating circumstances. Prince Fitzbürgenheim would have expressed



THE ARROGANCE OF A FOREIGN PRINCE.

good soldier he must never let his feelings get the better of him on parade."

The colonel was going to reply, but the general stopped him by saying, "It is no use arguing with me; my mind is made up and I never change."

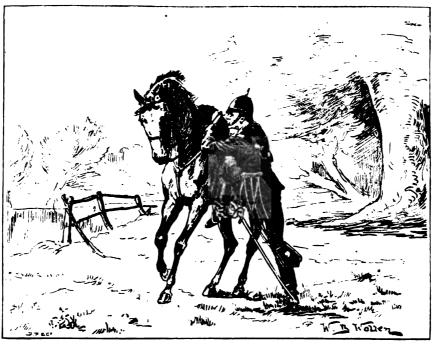
The colonel saw that nothing more was to be got by staying, so he took his leave, but the satisfaction he carried

his deep regret before a bench of magistrates, or perhaps a judge, and the sufferings of the afflicted would have been alleviated by the sympathies of his serene highness, and the thing would have ended to the satisfaction of everybody, but more especially to that of the foreign prince.

The colonel told the aggrieved officer of the result of his interview. The officer was unreasonable enough to think that His Serene Highness Prince Fitzbürgenheim had not made sufficient apology, so he said with all due respect to his commanding officer, "Well, sir, I wouldn't mind being knocked down and trampled upon by an English prince; but may I be —." The full-stop I find more convenient here than either the colon or the comma.

One of our captains had an adventure after this of a disagreeable nature, and I relate it to show that the volunteer officer's path is occasionally beset with difficulties. His zeal prompted him to have a march out to the rifle range; the inducement being class firing, the drum and fife band, and refreshments. Perhaps the latter attraction was as great as the other two put together. On the way a stupid old man stood gaping at the volunteers,

and for his pains he was knocked down by an omnibus, and had one of his legs broken. He tried to make the captain of the company responsible, having obtained the services of a pettifogging lawyer he brought an action for damages, which, however, he lost; likewise one brought by the legal scoundrel for costs. very severe October, and a constant attention at drill gave me such a cold that I was obliged to go on the sick-list in the beginning of November.



A RESTIVE ANIMAL

I am of a robust nature, but my conscience is tender, and I did not wish to draw my medical allowance, for to do so would, I thought, be very like obtaining money under false pretences. As regards allowances the military conscience as a rule is strong, it being thought not only pardonable but absolutely right to take as much out of the country as you can possibly get. To counteract this there is at the War Office a never-flagging zeal to cut an officer down as low as possible, often depriving him of his just due. These two principles work together for the general good.

It is possible that the smallness of the amount of the medical allowance had something to do with my not drawing it. The regulation authorised me to credit myself with twopence per week under this head. This being at the rate of eight shillings and eight pence a year, or two pounds three shillings and fourpence for the whole five years that the appointment lasts, no extra charge being allowed for medicine. I called in a private practitioner, whose fee I found was ten shillings and sixpence a visit, not including drugs. Fortunately mine was not a protracted illness, and my whole bill was under five pounds. I sent in my claim for this amount, and it was promptly disallowed. I went through the usual course of appeals, but all to no effect, my attention being called on each occasion to a particular paragraph in the regulation, in which it is clearly laid down for the guidance of those concerned, that twopence a week was the allowance and no more. I was further informed that I should contract with some medical man to attend me for that amount.

Acting upon their instructions I advertised, but strange to say I never got a single tender for contract. concluded from this that medical men. whatever their other faults may be, are not a money-grabbing lot, also that any officer of the army, unless wishes to lose money, should not take up the appointment of adjutant of auxiliaries unless he is extremely healthy himself or has a large and healthy family, for Government munificence is extended

to the wife and family. How the country stands this reckless extravagance is a mystery. I believe an officer, if he considers himself aggrieved, has the right of appeal to the Queen herself; but I determined after mature consideration that I would not lay my twopenny grievance at Her Majesty's feet, and I am obliged to confess that in this controversy the rascally War Office got the better of me, and that I lost considerably both in time, paper, and stamps.

The last great parade I was at, was the review held in Windsor Great Park to celebrate the coming of age of the Volunteer Force. It was a glorious day; bright, but not too hot, for a cool and refreshing breeze rustled the leaves of the grand old trees. There was not a particle of dust, and the feet of the citizen-soldiers sank deep into the

fresh green grass as they marched to their respective rendezvous.

We mustered in our own square in London, and then marched to the railway station, and were taken to Datchet, crossing the Thames on a pontoon bridge thrown over by the Royal Engineers. My horse, hired as usual, met me in the field when we landed on the Windsor side. The beast would not let me mount for a considerable time. turning round and round, while I hopped after with one foot in the stirrup until I was quite giddy, and my right leg almost paralysed with fatigue. At length I got my opportunity, and with a spring I reached the saddle. On my way up I heard a sharp sound as if my scabbard had struck my spur, but soon I became conscious of a cold sensation about the inside of my left leg, while the pantaloon that covered it was loose and baggy. To my mortification I found that every stitch of the seam had gone from my boot up to the upper part of my leg. This was a pretty state of things. I could not go past the Queen in such a plight. Sending my groom (hired with the horse) to a cottage that was close by to beg a needle and thread, I tried to get my horse up to the battalion, but whatever might have been his opinion as to red soldiers, he had an objection closely akin to aversion, to go anywhere near green ones. I coaxed, spurred, and cursed him, but all to no effect. He swerved, and reared, and curveted about; but at length by dint of hard work and perseverance, I got him within about twenty yards of the battalion, which was lying down.

"Is there a tailor in the ranks," I cried.

Up sprang half-a-dozen non-commissioned officers and cried out—"Any man by the name of Taylor in the ranks?"

I heard no more for the present, for a dozen men suddenly springing up so frightened my horse that he swerved sharp round, and bolted towards Father Thames, which when he saw so surprised him that he stopped dead short, and shot me over his head. I had one consolation in my sore distress; there were no females in rear. I fell soft too, which was another comfort, and the horse seemed satisfied with what he had done, for he allowed himself to be led quietly back to where at least a dozen men were drawn up awaiting my return.

"All these are Taylors, sir," said a non-commissioned officer saluting.

"I only want one to sew up my pantaloons," I replied, and then it came out that they were Taylor by name, but not tailors by trade. Luckily one of the Taylors knew of a tailor in the ranks and this man when found, retired with me to a wide-spreading elm, under the shade of which he sewed me up as I stood, while my groom took the brute three or four times round the field, just to steady the animal's nerves.

My friend in need I found to be a German, who being a naturalised Englishman had become a volunteer, and he said he liked it "ferry much better" than serving in his own country.

"Ach!" he exclaimed, "the discipline; mein Gott! it is vat you call ferry great."

"Mind my leg; I don't care to have the stitches put through the skin." I said this because I felt the cold needle once or twice against my flesh.

"Ze machine stitch, she vill not stand ze work, she is creeping into the Vest End. Zey vill say no; but she is zere in all ze big shops. I vill make you von suit of vat you call dittoes for zree pounds ten shillings, handmade; and if you like I vill measure you now."

I did not close with this offer for I was in a hurry, so I thanked my friend, and his stitches not only lasted through the day, but to the end of my volunteer service.

We now marched to take up our position, halting in an open space, some little distance from the broad walk, where we were eventually to be drawn up to receive the Queen. Arms were piled and the men fell out and lay about under the trees and had whatever refreshments they had brought with them, while groups of officers could be seen doing likewise. Some corps were luxurious enough to have regular luncheon, spread out on the ground beneath the shade of the trees. For the benefit of the men, there were in every brigade long wooden troughs of pure icedwater, which was most refreshing. The arrangements of the quartermaster-generals' departments could scarcely have been better, and every one admitted that as far as enjoyment went, their Windsor Review was far preferable to those held on Easter Mondays. The park in every direction was alive with people, for there were close upon 50,000 volunteers present irrespective of spectators. which direction you would the eye rested upon gay uniforms. But the time came to "fall in," and the scattered groups soon became consolidated masses. No music was heard, but the shrill blasts of innumerable bugles vibrated through the air. Presently all was quiet, and nothing was heard but the dead tramping of the men as they marched over the green sward, and an occasional word of command. Dense masses of red, green, blue and grey volunteers moved along to their respective positions, and when halted on the Long Walk, they looked like blocks of different coloured wood.

The line of quarter columns at deploying intervals, not only extended down both sides of the Broad Walk, but they reached far away on the slope of the park where the march past was to take place; the battalions drawn up there standing at right angles to those drawn up on either side of the road down which the Queen was to drive.

After a short pause another move was made, and each different coloured mass began to open out until they formed long lines with an interval of only a few yards between each battalion, and these intervals were occupied for the most part by mounted officers. There was the usual amount of marching, first to the right and then to the left, and the usual corrections as to the men's dressing.

General and commanding officers frequently become overanxious on these occasions; whole battalions and individual companies were dressed over and over again. Markers appeared and disappeared. One brigadier remarked, "Good Lord, colonel, do you call your line dressed? Why, it's as crooked as a cork-screw."

Another exclaimed, "Look at your supernumerary rank, sir; why, it's all over the place, like a flock of sheep. Where's the adjutant? It is no use your sitting there, sir, like a statue; why don't you see to the dressing of your men?"

The adjutant on such occasions is always sure to get more attention than he either deserves or likes. But by degrees the men settled down into their proper places.

Away to our right the noble grey pile, with its turrets,

that I could not keep the animal's nose out of the big drum; but now just at the critical moment he became restive, frightened by the noise of the rifles as the regiment presented, also by the glitter of my sword as I came to the salute. I tried all in my power to keep him in his proper place, but it was no good, and as the Queen passed, I had my back to her, and my horse began backing until I found myself in the midst of the royal procession, and directly the perverse brute saw the carriage he turned round and followed it, very much to my disgust and to that of John Brown, who was as usual in attendance behind the Queen. My position was ludicrous and painful. Every moment I expected to have half a dozen cocked hats ride at me, when figuratively speaking, I knew they would jump down my



HE WOULD BACK INTO THE ROYAL CABRIAGE.

towers and battlements, blocked the scene in that direction, and the battalions in line in the distance looked like beds of flowers cut in the grass on either side of the road, with its avenue of tall spreading trees. Presently a gun was fired from the castle, and immediately afterwards the Queen attended by her outriders and escort, was seen driving down the slope to where her citizen-soldiers were drawn up in a long double line to receive her. Slowly the royal procession came along and its position was denoted by the flash of the sun on the swords of the officers and the bayonets of the men as each regiment saluted.

My horse had become quite accustomed to the men, and on the march it had discovered such a taste for music as I rode at the head of the regiment by the side of the colonel, throat, boots, spurs and all. Some good-naturedly smiled upon me, John Brown frowned, and the following well-known verse came forcibly to my mind—

"So MicMacMethusaleh
Gave some warlike howls,
Trew his skhian-dhu
An' stuck it in his powels."

As I could not turn my horse round, I sneaked behind the regiment that stood opposite to us, and so got back to my position.

Shortly the bands struck up and the march past commenced, and the Queen must indeed have been proud of her citizen-soldiers, as with springy steps and military bearing, they passed before her. It was, indeed, a noble sight; the crowd was kept well in order, and the gentle costermonger was not in force, and his absence was regretted by none. Occasionally a voice would be heard exclaiming "Brayvo 'Ary! keep yer 'ead up, old man, and yer eyes to the front!"

Having passed the Queen, regiment after regiment wheeled off to the saluting base, and marched to their rendezvous, preparatory to their returning to the station. Everything was so well managed that there was no hitch.

The trains that were to carry the men back to London, or their other destinations, had the number of each corps in large figures on the engines, so that there could be no mistake. We arrived back to town, comparatively speaking, early, and thus ended a day that will dwell long in the memory of all those who took part in it, no matter whether they be volunteers or spectators.

Of our Honorary Colonel, I saw but very little. On one or two Easter Monday field-days, he was seen hanging like a scare-crow upon our flanks; but he did not seem of a pushing nature and no one took any notice of him; the reason being that he was neither of use nor ornament. It was at all times difficult to get money out of him for the benefit of the corps. He was ever ready to spend, but never did. Perhaps he was not taken properly. It was generally my pleasing duty to interview him, the burden of my song was always the same and so was the reply.

"The corps, sir," I would say, "is doing very well as regards numbers and general efficiency, and all we want to add to our prosperity is a little more money."

"Ah! exactly so," was the usual reply. "You wish me to understand, Captain Clynton, that the capitation grant is not sufficient. I fear the country will not stand a

further increase; but anyhow I will bring it before the House of Lords."

"Could you not yourself, sir, assist us?"

"Ah! that is another question, that will require consideration. But if I see the opportunity, I shall be very ready to spend some money either for marching, or for efficiency; in fact for anything you may recommend."

Unfortunately the vision of our Honorary Colonel was not strong in this direction, for though the opportunities were many, he never saw them. Perhaps the old adage would apply here. Certainly though we often met, he never parted.

My five years with the volunteers commenced in doubt and ended in sorrow, for I parted with both officers and men with extreme regret. I had, too, learnt many useful things-to respect the volunteers for the ready and willing manner in which they at all times did their duty, and to condemn some things that, I think, might be dispensed with for the benefit both of the volunteers themselves and the country which they serve. I would certainly discountenance all the nonsense that is so frequently talked at prize distribution. The organisation is also by no means perfect, and it is lacking in uniformity of system, and perhaps at times there is a disposition on the part of some to exercise too great a latitude in the construing of orders. Perhaps it will be readily admitted that corruption is not unknown in the force. And it is very much to be regretted that so good a movement should not be purged of all flagrant irregularities, and that such good material should not be made more of. Some corps return year after year every man as efficient, and in the language of a "Gaiety" song I would ask "How do they do it? how do they do it? I'd like much to know!" and so would many others.



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#### THE DECORATION OF "THE ROYAL RED CROSS."

### MRS. FOX.



N examining the roll of the Royal Red Cross Order. one cannot fail to mark that the recipients of this honourable distinction are not, as in other orders of chivalry, confined to one class of society. We have already shown four types:—(1) the Queen and the ladies

of the Royal Family, always foremost in whatever relates to the alleviation of suffering; (2) the daughter of the country squire, no doubt learning the first lessons in humanity amongst her immediate neighbours, her father's tenants, and the inhabitants of the village near her home; (3) the daughter of the professional man in the Great City; (4) the wife of the army surgeon. To-day we come to a new type—that of a class which deserves the most kindly sympathy from all of us—the Soldier's Wife.

For years past we have been told that this is a class upon which sympathy is wasted, that nothing can be done for them, that they are a thankless, hopeless crew. If it be so, whose fault is it? The soldier's? No. The soldier's wife's? No. It is our own fault. We are to blame. We officially recognise the fact that it is good for the soldier to marry, and we thus practically admit that his marriage tends to the good of the service and to the advantage of the State and Nation at large. But we do not carry the admission to its logical conclusion. A regiment is ordered abroad on active service. What becomes of the wives thus separated by the exigencies of state from their husbands—their protectors and ours? We shake our heads at them. To a few is given a miserable allowance, part of which is deducted from the scanty pay of our soldier facing the enemy. The rest we make objects of "charity," and thus deliberately demoralise them, or we leave them to the hardest, the cruelest of fates. Surely the country owes it to the soldier to find shelter and employment for his wife, whereby she may honourably earn the means of providing food and clothing for herself and children until he returns to support them; surely it is our duty to see that these women are usefully employed. Some time ago there was a movement for training soldiers' wives as soldiers' nurses. No doubt every woman is not cut out for a nurse, but that scheme ought not to have failed as it did. Was that failure not due to the apathy of the officers?

If the soldier were trained during his numerous off-duty

hours to some useful trade, occupation, or handicraft, we should not hear of Reserve men starving for want of employment, nor of the continually recurring scare about the failure of recruiting. So if the soldier's wife were somewhat similarly trained, the country would not on the outbreak of a war be subjected to the heartrending—and to a civilised people disgraceful—scenes now inseparable from the marching-out column and "the girl I left behind me."

As proof that the soldier's wife is capable of better things than it is the custom to attribute to her, there is the case now under notice. On the 20th December, 1880, the headquarters and two companies of the 94th Foot on the march were suddenly attacked by the Boers. The whole of the officers, non-commissioned officers, and men were either killed, wounded, or taken prisoners. Amongst the wounded was Mrs. Fox, wife of the regimental sergeantmajor. To add to the anxiety of the situation, Sergeantmajor Fox was himself badly hit and unable to render any assistance to his wife. The hardships and discomforts experienced by the wounded prisoners were bad enough for the men to stand, but tenfold more for the women. Obliged by the severity of her wound to remain at Bronkhorst Spruit, where the attack was made, Mrs. Fox, as soon as able to move, set to work to attend upon and alleviate the sufferings of the soldiers.

The 94th has grand traditions, going back for near 300 years. Formerly part of the Scots Brigade, the irony of fate and the War Office—which, like Gallio, "cares for none of these things,"—has now merged the regiment into the Connaught Rangers, and its number is unhappily lost.

But, from the day when, with the ancestor of the 94th, "Marlbrook s'en va-t-en guerre," down to the latest of our campaigns, perhaps no more heroic act has graced the records of the army than that of a wounded woman administering to the wounded comrades of her husband. The decoration of the Royal Red Cross which the Queen justly awarded for that service honours not only Mrs. Fox but also the Corps to which she belongs, and is a good augury for the soldier's wife of days to come, when the prejudice and sentiment which have for so long ruled us must give way before common sense and progress.

CHAS. J. BURGESS.

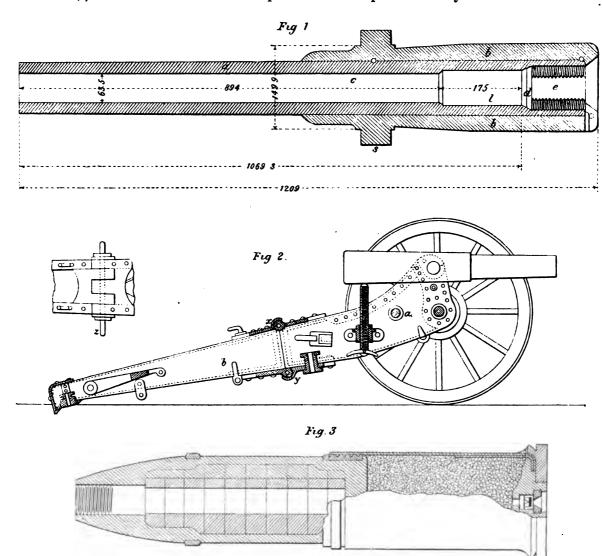
#### RUSSIAN MOUNTAIN BATTERIES.

Translated from Rivista di Artiglieria e Genio.

THE Russian mountain batteries, which lately consisted of 76.2 mm. bronze guns of the pattern of 1864, were partially re-armed in the spring of last year with Baranowski 63.5 mm. steel guns.

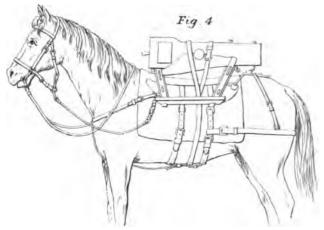
The latter have an internal tube (a) and an external one (b). The tube (b) carries the trunnion shoulder plate,

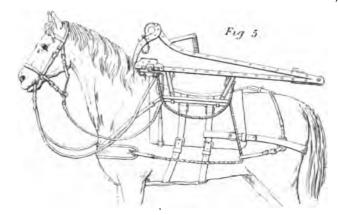
bottom (d), and finally the screw of the breech (e). The rifled part has twenty grooves of slight depth running from left to right. The rifling is helicoidic, the length of the twist being about thirty calibres. The breech-locker consists of the breech-screw which admits the detonating apparatus, and the parts necessary to secure it. The bore of the



PLANS OF RUSSIAN MOUNTAIN GUNS AND AMMUNITION.

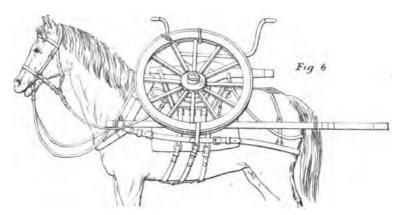
the middle point of the trunnions and the sight-leaf. In the left rear face of the breech is placed the hinge of the breech-locker, in the right the groove of the tangent sight. The interior of the gun is divided into the following parts: the rifled portion (c), the transition cone (l) the cartridge breech contains a spring extractor, which, when the breech is closed, rests on the edge of the cartridge bottom. The firing apparatus is fixed on the axis of the breech screw, as in the Colt system. It returns automatically when the breech is opened, and prevents premature firing.



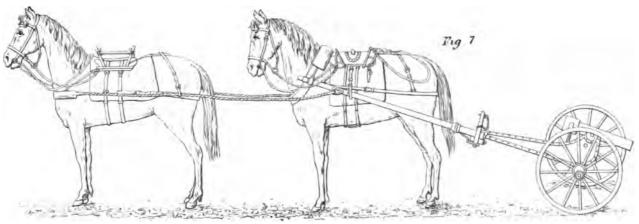


CARRIAGE OF GUN.

CARRIAGE OF TRAIL.



CARRIAGE OF WHEELS AND SHAFTS.



In Draught.

The gun carriage is constructed on the Creil system. It consists of the head (a) crossed by the axletree, and of the end (b). These two parts are joined in x and y by two hinge bolts (z). The axletree is cylindrical. The wheels are similar to those used for the old mountain guns of 76.2 mm. The laying apparatus permits firing at angles varying from 12° to + 25°. The transport of a 63.5 mm. gun requires four horses. The first carries the gun, the second the axletree and the head of the carriage, the third the end of the carriage, and the fourth the wheels and the shafts.

The ammunition for the Baranowski mountain gun consists of grenades and shrapnel, provided with the shell fuses used with the old 76.2 mm. gun. The projectiles are 3.5 calibres long. Centreing is effected by copper rings. The two projectiles weigh 4.340 kg., the charge 384 g. The ammunition is transported in iron boxes, subdivided into nine compartments, four of which contain grenades, four shrapnels, and the remaining one accessories of various kinds.

The following are the principal dimensions of these guns:—

Length ·		1209	mm
Length of rifled section			
Length of bore		1069	"
Length of line of sight		432	>>
Weight of gun complete .			
Preponderence			
Weight of head of carriage			

Weight of end of carriage . . . 43.4 kg. Weight of one wheel . . . . . 26.2 "
Weight of gun carriage complete 191.2 "
Distance between wheels . . . 800 mm.
Initial velocity of genades . . . . 284 "
Initial velocity of shrapnels . . . 286 "

As a rule, in the foot mountain batteries the guns are carried on horses and the men are on foot. In the horse mountain batteries the guns are drawn and the men mounted. The pack saddles, (Figs. 4, 5, 6) are provided with two wooden arcs joined by as many iron bound boards and placed by means of two straps on the saddlecloth. It comprises further the breeching and the breast-strap which prevent it from slipping. The horse carrying the wheels is provided with a light collar to which are attached the ends of the shafts. The horse carrying the gun carriage is provided with a breast strap and two traces.

The different pack saddles, which are intended either to transport the gun itself or its carriage, are furnished with the accessories shown in the accompanying diagrams. The pack-saddle for the gun is furthermore provided with two small boards joined by transverse bars, each pierced with two holes. In the horse mountain batteries each gun has a common limber, and is provided with an ammunition cart. When a horse battery is carried on the backs of horses, the limber boxes and the guns are dismounted and the different parts are placed on the backs of fifty-six draught horses.



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#### MILITARY BIOGRAPHY.

# BRIGADIER-GENERAL HENRY BRACKENBURY, C.B.



HE subject of the present biographical sketch was born September 1st, 1837. Henry Brackenbury comes of an ancient Lincolnshire county family. His father, an old Peninsula officer, was three times severely

wounded. He behaved with great gallantry in action, but had to retire from the service in consequence of his wounds. He died in 1844 from paralysis brought on from the effects of one of them—a bullet having struck him in the cheek and lodged in the back of the neck close to the spine. Yet long as was the interval between his active service and his demise he died without having received the Peninsula medal. Such were the customs of the "good old times!"

Two uncles of Brigadier-General Brackenbury were in the service—Sir John and Sir Edward Brackenbury; and of his two brothers Richard Green and Charles Booth Brackenbury, the elder died of cholera in India while serving during the Mutiny as a captain in the 61st Regiment, the other is now a colonel in the Royal Artillery, and superintendent of the Royal Gunpowder Factory at Waltham Abbey. Thus Henry Brackenbury belongs to a distinguished family of soldiers, and the spirit of enthusiasm for the profession of arms runs in his blood.

Educated at Tonbridge and Eton Henry Brackenbury was looking round for a profession when the pressure of the Crimean war and the demand for officers caused the Government to offer commissions in the Royal Artillery to young men who, not having entered the Royal Military Academy in the usual way, were ready to pass an examination and go through a year's training in the Arsenal-a curriculum which then was called the "practical course." He succeeded, and gained his commission in April, 1856, too late for the Crimean war, but in time for the Indian Mutiny, during which he served with General Whitlock's column, and was present at the capture of Banda and Kirwee. An immense amount of booty was taken on that occasion, and the questions which arose between the captors and the Government concerning this treasure cannot be considered finally settled, notwithstanding the off-handed and imperious determination of officials not to re-open the matter. The day must come when justice will be insisted upon, for the question where the money went cannot be indefinitely burked. Many a gallant fellow who took part in the above died without having received any prize money, and possibly all who shared the dangers and gained the success will be cold long before a just Government is in office to render justice to all concerned.

Lieutenant Henry Brackenbury was for some time an adjutant of the depôt at Woolwich. He was afterwards posted to the Royal Military Academy as officer for discipline, and subsequently as instructor in artillery. Later on he was appointed professor of military history. He was serving in this capacity in 1870 when the great Franco-German war broke out, and he was shortly afterwards despatched to the theatre of war as chief representative of the British National Society for Aid to the Sick and Wounded. A clear head was much wanted at the time, and Captain Brackenbury proved to be the right man in the right place. He succeeded admirably in carrying out his mission with tact and firmness. It was his first opportunity for showing of what stuff he was made, and he won golden opinions as well as various foreign decorations. He was present with the armies until the conclusion of the armistice, and for his services he was appointed Officer of the Legion of Honour, by a special decree of the French Government of National Defence. He was also made a Knight of the First Class of the Royal Bavarian Order of St. Michael, and received the Iron Cross from the Emperor of Germany.

Returning to his post at Woolwich, Captain Brackenbury was on a sick bed when in 1873 the resolution was taken to

send out an expedition to Ashantee under the command of the present Lord Wolseley. Captain Brackenbury applied for a post on the staff, and was accepted as military secretary. He succeeded in avoiding the medical examination, went out, and passed like others through the baptism of fever, but escaped with his life, and was present at all the actions in the campaign. For his services he was mentioned in despatches, was given the brevet of major, and received the medal with clasp.

On his arrival in England after the campaign he wrote with great speed the Narrative of the Ashantee War. That campaign was a trifle in itself, but it had great effects. It was well described by Lord Cranbrook, then Mr. Gathorne Hardy, Secretary of State for War, as "a short but most splendid campaign." England through it became possessed with the idea that she had a capable general, and that general drew around him a body of young and active officers with a burning zeal for war. It may be doubted whether the country has yet recognised how seriously its ideas have changed of late years, and what amount of influence a very few officers working with sword and gun have exercised on the progress of military opinion.

The Ashantee war was soon followed by disturbances in South Africa, and Lord Wolseley was employed in Natal to pacify, not to strike. Major Brackenbury accompanied him there, and some time afterwards again received the appointment of military secretary when the Zulu war appeared to be languishing. The battle of Ulundi however, occurred before Lord Wolseley and his staff could appear on the scene, and it was followed by the operations which became necessary to be taken against Sekukuni in Major Brackenbury, at first military secretary, succeeded Colonel Colley as chief of the staff when that brave but unfortunate soldier was called to India as private secretary to the viceroy, Lord Lytton. For his services in South Africa, from September 29th, 1879, to February 7th, 1880, he was mentioned in despatches, made a C.B., and received the medal with clasp.

When Colley returned to govern Natal, and find a soldier's grave there, Lieutenant-Colonel Henry Brackenbury replaced him as Lord Lytton's secretary. But the resignation of the viceroy followed very shortly afterwards, and Colonel Brackenbury's longings for active employment found a rather uncongenial outlet in his appointment as military attaché at Paris. After some sojourn there he was in London when the Phœnix Park murders sent a thrill of horror throughout Europe. Colonel Brackenbury was then offered a post which virtually was that of a secretary for the repression of crime to the lord-lieutenant. This he accepted, and in his new position he did good work, but the duties were not such as suited his ardent temperament. Ireland was to be calmed, not kept down by the strong hand, and Henry Brackenbury was somewhat impatient of the restrictions consequent on the adoption of a pacific and conciliatory policy. Still all went on well, and he had

fairly settled down to his work when the Government decided to send an expeditionary force to Egypt in 1882. Colonel Brackenbury then felt the war fever in every pulse and every nerve. Uneasy in his position, he strove to be sent out with his old chief, but in this effort he failed disastrously. The Government behaved with a more than usual amount of official ungenerosity on the occasion, for they accepted a resignation but half offered, and refused to allow him to proceed on active service. His old commander and the old staff sailed without him, and left him at home disappointed and discredited.

Under these circumstances, which were most galling to Colonel Brackenbury, his friends had considerable difficulty in persuading him not to resign his commission. Good advice, however, happily prevailed, and Colonel Brackenbury joined at Gibraltar for regimental duty, where he remained about a year. His chief meanwhile was faithful to him, and succeeded, not without some trouble with the authorities, in taking him to the Soudan, where he first under and with Sir Redvers Buller worked the details of the boat advance to Dongola, and was afterwards named brigadiergeneral, chief staff officer, and second in command to General Earle with the boat column then proceeding by river towards Abu-Hamed and Berber. General Earle fell in the first action, and Brigadier-General Henry Brackenbury then assumed the command, completing the success by the measures taken after the death of his superior officer.

The column had afterwards no history, as it was recalled before reaching Abu-Hamed, but it was conducted under trying circumstances of great and grave difficulties in a most masterly manner both in its ascent and descent of the river. General Brackenbury now commands a brigade, and will do so if the march on Khartoum is to be carried out hereafter.

The career of General Brackenbury has been that of a keen and energetic soldier of high ability, and ardent to a fault in love of the active part of his profession. Whatever he has done-and in how many capacities has he been employed?—he has done well, and all his duties have been performed in a manner that defies the most captious criticism. No one admits more readily than himself that he made a grievous mistake in the Irish affair, and he has often been heard to express his sorrow on this subject. But if the error was grave, one punishment—the loss of the campaign of 1882—was surely enough for a fault natural in a character made for war and nurtured in that life of danger and adventure which frequently intoxicates those natures most susceptible to its influence. present is a time when England wants all her best and most experienced soldiers, and in the trials which seem to be coming upon us either now or later there will be room enough for all commanders who have been tried and can be trusted to do workmanlike services. Amongst these it is needless to say that Brigadier-General Henry Brackenbury, C.B., must certainly find a place.

#### CORNISH'S ARMOUR-CLAD SHIP.



It is with much pleasure that this magazine places before its readers a novel idea for an armour-clad ram or gun boat, proposed and designed by Mr. Thomas Cornish, M.E. (the well known inventor of many useful

articles for saving life at sea) assisted by his engineer, Mr. Benjamin Finch.

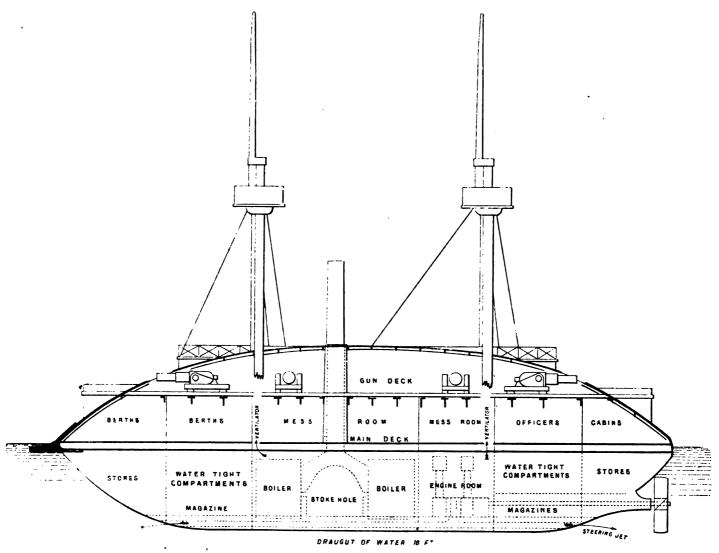
The drawings will give a clear general idea of the vessel's construction and form.

eight compartments, and to give steadiness in action, so important in taking aim.

3rd. The power to turn the ship round on an axis in her own length, and security from disablement of her steering gear.

4th. Absence of all smoke from funnels and great economy in fuel.

General Description.—These four conditions being met, make this novel and most convenient small and handy war ship, ram, or gun boat, a most terrible opponent to the



BROADSIDE MIDSHIP SECTION.

The objects in view are as follows:-

1st. The outline to obtain a maximum strength, to resist by deflection shot or shell when struck.

2nd. The twin hulls to give safety from upsetting or sinking if damaged by shot or rammed in either of its great unwieldy iron-clad of the present time, as the form of the vessel is such as to resist the action of shot upon any part of its surface by deflection—a principle that has hitherto been greatly lost sight of by European naval authorities. Thus it can, in front of a battery

or an enemy at sea, keep turning within its own length, and, firing two guns every minute, deal most terrible destruction.

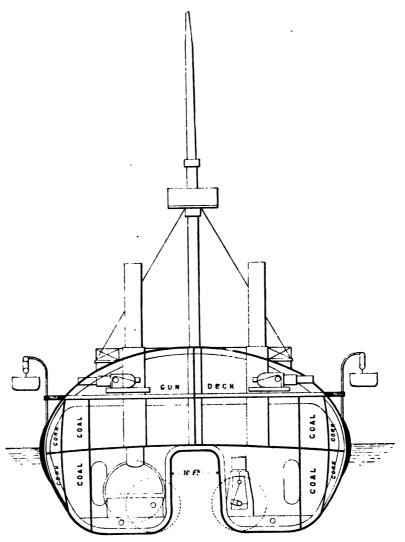
Such a vessel in the hands of an active officer would do fearful execution to an enemy not similarly constructed.

This ship would be one of the safest ever designed. The two hulls being subdivided into four watertight compartments, and the engines and boilers being divided and one of each complete in itself placed in either hull safely below water line, cannot easily come to grief; for if

beneath water is formed like a twin ship, and thus secures the advantage of the mid-water passage to diminish resistance, to increase speed and avoid rolling movement when in action.

Ram.—The prow forms a ram of a formidable type. The stern is rounded and slightly overhangs and protects the two screw propellers, which are driven by separate engines and boilers placed midships in each of the twin hulls.

Shell.—The outer shell of the hull is of steel armour



TRANSVERSE MIDSHIP SECTION.

rammed on one side and the engine or boiler room broken into, that compartment only would be damaged, the other hull with its engine and boilers would be safe, so that the vessel could be neither sunk nor upset.

Decks.—Ample walking decks are provided, ladder-ways are fixed to the masts for riflemen or machine gunners by which they can reach the protected tops.

Dimensions.—This vessel measures as here shown 130 feet long by 64 feet beam over all, with 18 feet draught of water. In form, it resembles a floating turtle. The hull

plate,  $4\frac{1}{2}$  inches increasing to 6 or 8 inches thick from three to four feet above the water line, and to the upper or gun deck, and to about four feet below the water line.

Turtle Roof.—The outer turtle-backed roof is of steel  $2\frac{1}{2}$  inches to  $3\frac{1}{2}$  thick. The twin hulls and inner shell of ship is proposed of  $\frac{3}{4}$ -inch steel. The sides, ends, and back to be overlaid with wood (Jarrah wood preferred), the armour plates, say 3 feet to 4 feet square, to be laid on the Jarrah casing and secured with bolts.

Main Deck.—The whole vessel is strongly braced

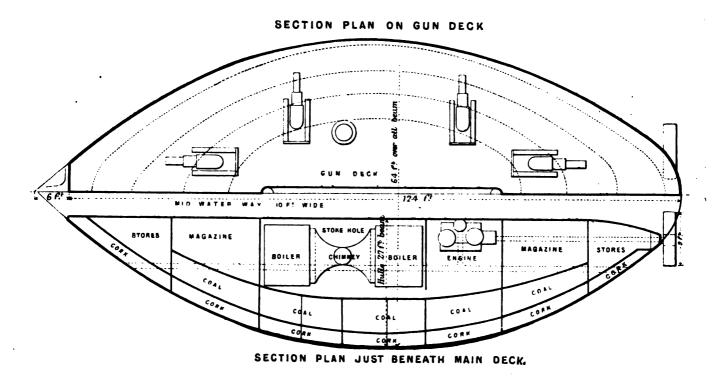
together with a steel deck and beams, striking from below water line, as an extra precaution against shot or shell that may penetrate the outer armour or shell plates and pass through the gun deck or the lining of cork and coal placed to resist the effects of any penetration of the armour. The force of any shot or shell would be thus expended and unable to penetrate the lower deck.

Guns.—Eight guns are provided upon the gun deck. This is made level and of Jarrah wood. The bulk-heads and partitions are cased with thin sheet steel.

Materials, Strength and Protection.—Apart from the steel shell armour, wood casing and inner steel shell, a

Steering.—The steering is very peculiar. The ordinary rudder may be dispensed with as being so liable to injury, and unsuitable in its action, and offering serious resistance to the progress of the vessel. The object in view, is to turn the vessel on an axis of its own length when at rest, and present either broadside or end-on fire. This result is effectually obtained.

Boilers, Smokeless.—The boilers are of steel, multi-tubular, high pressure. The furnaces are made to consume all smoke completely, and work with the greatest possible economy of fuel, in order to avoid observation at a distance by the enemy at sea.



stratum of two to three feet of cork is encased also with steel lining, and within that the coal bunkers are provided to contain from four to six feet of coal, which extends from stoke-hole floor to gun deck, thus providing about nine feet of resistance to shot or shell to perfectly protect the boilers and machinery from injury. The main deck also being of strong steel, forms the main stay to the ship.

Staff-quarters.—This deck is divided off for officers' and crew's quarters.

To effect these two great ends, M1. Benjamin Finch's patent furnaces and boilers will be introduced, which insure an economy of thirty per cent. of fuel, and effectually prevent any trace of smoke, so that telescopic funnels may be used in time of action.

Masts and Ventilation.—Two masts of steel are provided, which act as ventilators to the entire ship, and to the stoke holes.



#### THE SERVICE CLUBS.

#### V.—THE NAVAL AND MILITARY CLUB.

HE historical building known as Cambridge House, where the father of the present popular Commanding-in-Chief so long resided, and which was subsequently inhabited by the

great patriot minister, Lord Palmerston, of whom Lord Houghton said, "he went about his gravest deeds like noble boys at play"—this is the building,—dear to all Englishmen,—that is now occupied by the Naval and Military Club.

It may be stated in limine, that the Naval and Military Club was the first located in Piccadilly, and with the exception of the Army and Navy is the only Club for which being a member of the Regular Forces is an essential condition of nomination; and the number is limited to 2,000 home members.

The foundation and progress of this Club is well worth recording, as showing what good management can effect.

The only "Service" Clubs existing in 1862 were the "United Service," "Junior United Service," "Army and Navy," all filled up to their full number; and to meet the wants of those who wished to join a Service Club without delay, the Naval and Military was founded in March, 1862, by a party of officers chiefly from the "Buffs," then quartered at the Tower of London.

The Club commenced with 150 members, at an entrance fee of 15l. 15s, a home subscription of 5l. 5s., and a supernumerary subscription of 10s. A furnished house, No. 18, Clifford Street, was first taken on a yearly tenancy, and opened for the use of members in September, 1862. In less than a year this was found inadequate to meet the daily increasing requirements, and at the end of 1863 a move was made to No. 22, Hanover Square—more commodious premises. Here the Club remained until the end of 1865, when the same inconvenience of overcrowding was again experienced, and Cambridge House was taken. It was opened in April, 1866; the lease then acquired terminated 1876, when the Sutton Estate granted a further extension for sixty years, at an increased rental of 5,000l. a year.

Having secured a magnificent property, the members determined to make the house as convenient as possible, and for that purpose it was closed from December, 1876, till April, 1878.

The architect, Mr. J. Macivor-Anderson, at once set to work, and added on the site of the former stables, coachhouse, and yard, the following:

The dining-room forms part of a considerable addition then made to the Club (1876-77), comprising a complete new set of kitchen and other offices below, and billiard-rooms above. It may be said that the arrangement of the kitchen and offices connected therewith are as perfect as anything could possibly be.

The dining-room possesses the charm of perfect quiet as the windows look into the garden of the Club; and as it has a southern aspect the room is always cheerful as a

breakfast and luncheon room. The room is eighty-five feet long by thirty wide, with a recurved portico, thirty by fifteen feet, central in the length of the room for the purposes of service. The room is twenty-four feet high in the central portico, and its peculiar treatment with the bow compartments at the end, although suggested by a necessary restriction in respect to adjoining lights, forms an agreeable feature, and improves the general proportions of the room. The service arrangements are excellent and were the subject of much study. The recurved portico of the room referred to is in direct communication with the kitchen on one side and the butler's department on the other, and has been found in practice both convenient and satisfactory.

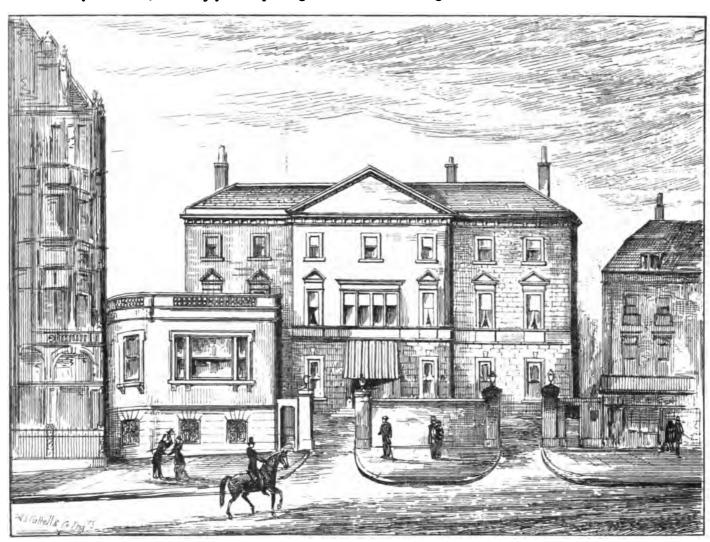
The internal decorations of the room are purposely designed in a severe rather than a florid style. The room is approached by a groined corridor overlooking the garden, designed by the architect for the purpose of connecting the old and new portions of the house. The garden with its verandah forms one of the most attractive features of the Club, and in the summer months is much frequented by the members. A certain number of newspapers are allowed in this room until 4 P.M., after which hour they are removed. The ventilation of the Club has been carefully studied, and is considered by the members to be very satisfactory. The temperature of the rooms is kept as near as possible to 65°.

The smoking-room—the largest in London—was formed out of several of the rooms of the old house, and its irregular shape is thought by the members to give it an exceptional charm, with the windows looking on to the garden and its verandah. Newspapers are found in this room, writing materials are supplied, and those who prefer pipes to cigars can be provided with a drawer to keep them in.

The entrance hall was made out of two of the old rooms, and forms an agreeable lounge for members.

Lord Palmerston's well-known reception rooms on the first floor facing Piccadilly—including the octagon room formerly Lady Palmerston's boudoir—remain untouched, and are used as the members' morning or reading-room. The new writing-room on the west side, looking on to Piccadilly and the Green Park, is both convenient and The architect's endeavour has been, while enlarging the house and in adapting it to the quasi-public requirements of a large Club, to retain as much as possible its domestic character, and to promote the comfort and convenience both of the members and the establishment, more than to aim at any display. How admirably Mr. Macivor Anderson has succeeded, any one who has gone over the Club and seen the arrangements of the kitchen and the offices in connection therewith, or the lavatories, baths, and dressing-rooms, will come away satisfied that there is no more convenient Club in London. The committee and their indefatigable secretary, Mr. A. K. Tharp, have done everything to promote the comfort of the members; nothing seems to have been overlooked. All the doors are self-closing and perfectly noiseless. There are lavatories up stairs as well as down. Writing materials are found in every room excepting the billiard and dining. There is a private dinner room available for parties of not more than sixteen, which can be engaged on giving forty-eight hours' notice. There are bars close to the billiard-room, where the usual refreshments can be obtained. Guests when invited to dine are not relegated to any particular part of the dining-room, but are in every way treated as if they were heartily welcome, and enjoy the privileges and

Regimental list—suggested, we believe, by the Secretary—which shows at a glance those officers who are on full pay or who have retired from the Service that are members of the Club. This is an exceedingly convenient reference list, and might be imitated with advantage by the other Service Clubs. As this Club was able without difficulty to pay the expenses of the alterations and furnishing, we may hope the day is not far distant when we shall see the rooms decorated with busts and pictures of those members who have distinguished themselves in recent wars, among whom we might mention the names of Lord Alcester and



advantages of the Club for the time being as if they were members; while the rules and regulations evidence an earnest desire on the part of the committee to maintain the high position the Club has attained, sans peur et sans réproche, and the liberal spirit in which they are drawn up is evidenced in Rule XIII., which provides that any member who may quit the United Kingdom on her Majesty's service on or before the 31st March, having previously paid his annual subscription, shall be placed on the supernumerary list and be entitled to have the balance of his subscription refunded. The committee publish in addition to the usual list of members and bye-laws a

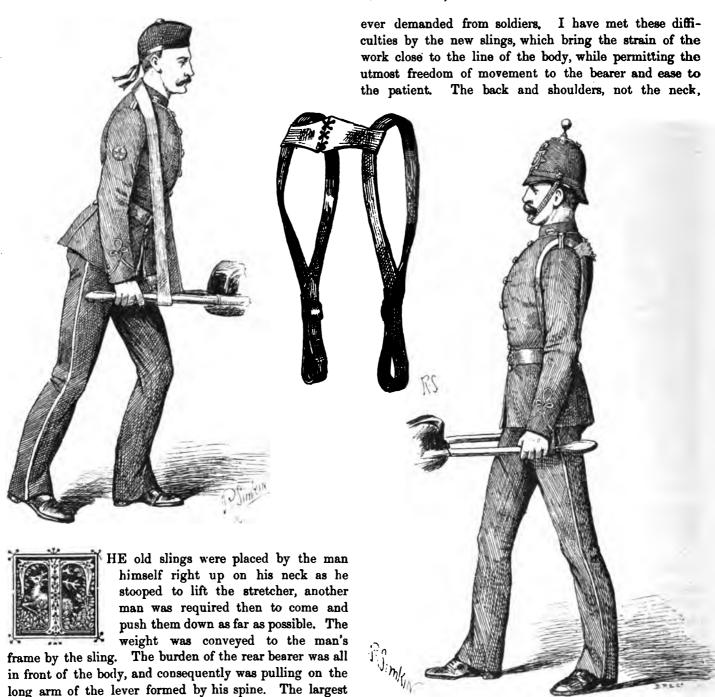
Major-General Sir R. H. Redvers Buller, V.C., an officer who has for many years past identified himself with the rise and progress of the Club.

In conclusion, I would express my thanks to the Secretary, Mr. Tharp, for his courtesy in showing me round the Club, and calling my attention to the many conveniences and improvements that have been from time to time suggested by the Committee or himself, and to Mr. Macivor Anderson, the Architect, for the details of the additions that have been made to the Club by him.

JAMES C. DICKINSON,
Retired Strff-Surgeon

## NEW SLINGS FOR STRETCHERS.

PROPOSED BY SURGEON-MAJOR FRANKLIN GILLESPIE, ARMY MEDICAL STAFF.



portion of his force was thus expended in keeping himself upright, and the slightest roughness of the ground was

liable to upset him and his load, while his power and the

work accomplished were enormously diminished, so that

stretcher-bearing involved some of the most severe exertion

receive the whole strain, and this is placed to the greatest advantage. If one tries to raise a cross-beam first with his neck and then by the upward thrust of the shoulders he will be able to estimate the difference. The appliance

is most cheap and simple, consisting entirely of leather with a strong buckle to shorten or lengthen the loop which holds the stretcher. The present slings can be easily altered to the new pattern, the buckle on the inside to be pointed downwards. The yoke must be made of strong leather four-inch wide, divided and laced in centre for enlargement as required. Any bearing from waist belt is

essentially wrong in principle and disastrous in practice. The power of the shoulder and back muscles, and the elasticity of the spine are the true factors; these are lost by attachment to waist, and all movement impeded.

I believe 50 per cent. of power is economised by my slings.

FRANKLIN GILLESPIE.



#### AN IMPERIAL NAVAL AND MILITARY ASSOCIATION.

A PROPOSAL of a novel and remarkable nature was made in the issue of the 4th of April by the Admiralty and Horse Guards Gazette—a new service weekly periodical, which already possesses a more superior staff of practical writers on technical subjects than either of the other Naval and Military weekly journals.

The proposal was the formation and establishment of an "Imperial Naval and Military Association." To many, both in and out of the naval and military services of Great Britain, such an association may appear uncalled for and unnecessary. To those who are thoroughly acquainted with the administration of the two Imperial services as a whole, an institution of this character would form one of the strongest safeguards of the country's interests, particularly in time of peace, when, as Sir William Napier, the great military historian, has truly said is the period when the military machine should be perfected—in other words, when all that relates to naval and military administration and adequate preparation for a probable time of national trial by the agency of war, should be maintained at its highest point of efficiency. It may be asked, what would be the functions of an Imperial Naval and Military Association? Its most important function would be to see, as an independent body, that this country and all its vast interests are properly protected by the maintenance of an adequate Army and Navy, and that these Imperial services are equipped with warlike appliances of the most superior quality this country can possibly produce -in fact, to watch over the acts of the administration, so that party or other prejudice or interested official motives are not at work to the detriment of these services. In addition, to take measures by which all that relates to the adequate maintenance of the services on correct principles, shall be properly represented in both Houses of Parliament to protect the interests of patriotic inventors from injury direct and indirect, to take up cases of individual illusage by administrative functionaries and have them thoroughy investigated on the strictest principles of justice. The gross cases of injury, injustice, and positive robbery of ideas by officials, from those who have devoted their high talents to the improvement or perfection of matériel of war, if related truthfully, would, even within the last decade, fill volumes. In all these shameful cases, the unfortunate inventors have had to legally fight with their own money those who have deeply injured them, while the administration has fought them with the money belonging to the country, to the utter ruin, as a matter of course, of the

inventor, who had supposed he could rely on the justice of Service administration. With the establishment of such an institution as that proposed by the Admiralty and Horse Guards Gazette, we should not hear of such a case as that of Mr. Lynal Thomas, who invented the first steel rifled gun of heavy calibre, to have the results of his labours taken from him with the most unblushing effrontery, and when a British jury, after a patient hearing of over ten days, had granted him an award of nearly 9,000l. as compensation for incurred expenses, to see himself done out of it, on a petition of right gained by the employment of public money against what little had been left to him. should never have heard of the shameful case of Mr. Daw who invented the Snider cartridge, and who was foolish enough to trust his invention and all the plans of machinery for producing these cartridges to certain officials of the War Office; or of the scandalous revelations in the House of Commons respecting the production of Snider cartridges, brought about by Sir John Packington, formerly Secretary of State for War. We should never have had Colonel Hope, V.C., constantly asserting that he had been regularly done out of his invention of the shrapnel shell. With such an institution actively protecting inventors from injury during past years of wrongdoing by interested officials, we should never have heard of a host of other cases of injury to talented men of this

With such an institution, we should not have Sir Edward Reed fighting without ample support to prove the condition of the navy to be inadequate to the necessities of the country, or that the construction of ships was unsafe or unsound. All matters relating to the army or the navy would be independently and impartially ventilated by an institution of the proposed character. Men of the very highest influence and talent would be on its council, and of every shade of public opinion, all working together as an independent body in the true interests of the British Empire. The sphere of the institution's action would enlarge year by year. Its measure of usefulness would become more and more apparent. In a great degree, it would soon be a National Insurance Association against every measure tending to the injury of the Army and the Navy. The more the proposal is considered, the more does it become apparent that it should be persevered with by a pro tem. committee formed for the purpose of the association's permanent establishment.

EDITOR.

## THE USE OF TRANSPORTABLE STEAMBOATS IN WAR.

(Neue Militärische Blätter.)



N the Prussian invasion of Denmark in 1864 the want of a few light and transportable river steamers was the subject of some complaint and much discussion. The need of such vessels was brought home with especial force to the Prussian military mind in the

projected crossing to Fünen. It was on this occasion that the author was commissioned to seek for such craft on the lakes of Jutland. As his search was not attended with any practical results, estimates of the time needed to build these vessels were invited from different German ship-building firms. The answer received by the German authorities was, that they would require from three to four months; and the whole project had therefore to be abandoned.

Since that time, the want of this class of vessel has been often felt. Although the campaigns of 1866 and 1870-71 were so quickly terminated, the -possession of a number of transportable steamers would have been of the greatest service to the Prussian arms. As is well known, it was the intention of Prince Frederick Charles to march a large body of men down the right bank of the Danube; and his plan was in great part mapped out when the suspension of arms occurred. Had his intention been carried out, the value of a number of swift river steamers would of course have been incalculable. On the Seine and the Marne, too, such vessels would have materially lightened the difficulties of the Prussian advance.

If, says the German author, we seek to pierce the gloom of the future, to portray in imagination the next great war. we see in the west a wall of fortresses barring the German advance into France, and probably necessitating a longer or shorter stay on the Maas or the Moselle. If, on the other hand, the course of events should lead to a campaign with Russia, the first struggle would probably take place among the low-lying, well-watered districts of the Vistula, the Narev, the Bug, the Piliza, the Pripet, or the Niemen. Without the help of such vessels a campaign in Russia proper, where population is thin, roads are rare, and railways scattered, would be in the highest degree difficult and dangerous. The numerous water highways would be an easy and effectual means of transporting both men and material. With a number of small and handy steamers an army could not only be kept continually informed of the enemy's movements, but could cut off and turn to its own use the craft of all descriptions to be found along each

considerable stream. This work could not be thoroughly done by any kind of rowing boat. By the help of such steamers an extensive district watered by a navigable stream could be easily and quickly subdued, and compelled to provide necessaries which it would otherwise be exceedingly difficult to obtain. By drawing upon the enemy for their supplies, the invading troops would be enabled to utilise for other purposes the necessarily congested railways in their possession. For the rapid reduction of fortresses protected by rivers or lakes, the possession of such steamers would be almost indispensable.

In the case of war with a powerful maritime nation, or with countries like Holland or Belgium, events may recur, as in the Danish war, when such steamers, transported by land or by the rivers of the country, may render the most effective service to an invading army.

Experience has proved, however, that these boats cannot be built quickly enough for practical purposes when the need has once arisen. It is therefore proposed to build a number of these steamers and hold them in reserve. The practical importance of such a step can, in the opinion of the German author, scarcely be disputed, and should be acted upon with the greatest possible promptitude.

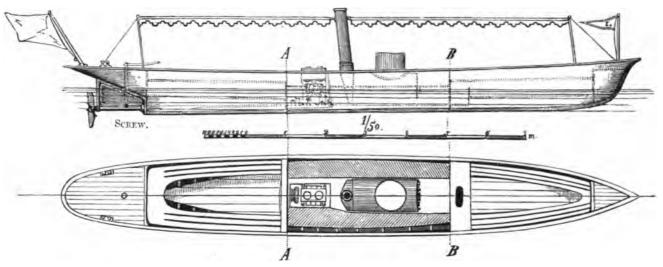
Given the advisability of building such steamers, the question next arises, What is the most practical form in which they should be constructed? In this case we are met with a difficulty at the outset. In order to answer every requirement the steamer should be large enough to carry a considerable body of men. In this event it should be provided with a few field guns, and offer adequate resistance at least to rifle fire. But the weight of such a vessel would be of itself an almost insuperable difficulty. The chief merit of these steamers should be the ease with which they could be transported and fitted for service. A steamer of the above description would tax to the utmost the resources of the transport service, and when actually arrived at its destination would require a time for fitting, which, judging by the shortness of late campaigns, would neutralise every advantage.

The only practical method, then, would be to build a steamer large enough to carry a few officers and one or two trained men. In case of emergency such a vessel should be able to tow a couple of light boats without serious loss of speed. Such a boat could be used for reconnaissance for transporting troops over wide rivers, for building or destroying bridges, and would be of considerable service in foraging expeditions. Inquiries among the best shipbuilding

firms of Germany have shown that there are two classes of steamers which should answer the required conditions. The construction of one of these may be seen from the accompanying diagram. It is 12 m. long, 2 m. broad, draws 1 m. of water, and weighs 3,000 kg. Its speed is from 5 to 6 m. per second, or from 10 to 12 knots per hour. Such a vessel would cost about 9,000 marks (£450). It would carry from 30 to 40 men, and could tow 10 boats of 10 men each without serious diminution of speed. The size of this vessel would of course preclude all possibility of transporting it as a whole. It is therefore so built that it can be easily and expeditiously divided into three parts, each 4 m. long. These portions can be placed without trouble on railway trucks, and fitted together at the edge of the river for the navigation of which the boat is intended.

these steamers are intended? In the opinion of the German author each would be useful in its way. In the projected crossing to Alsen and Fünen, as in Prince Frederick Charles's proposed march down the Danube both boats would have been most welcome, and some vessel of the kind would in each case have been indispensable. The smaller boat would, he thinks, be valuable chiefly as a means of enabling the generals in command to inspect in person the country in which they would have to operate. In these steamers they could themselves superintend operations which they would otherwise be forced to leave to subordinates. The larger boat could be used, if protected against rifle-fire, for offensive and defensive purposes of many descriptions.

The German Government is recommended, then, to build at least two of the larger and four of the smaller boats.



TRANSPORTABLE STEAMBOAT TWELVE METRES LONG, DIVISIBLE INTO THREE PARTS AT A AND B.

The other class of steamer would be only 7 m. long and 1.80 m. broad. It would draw from 50 to 40 cm. Its total weight would be 1,000 kg., its cost only 3,000 marks (£150). Its speed, however, would not exceed from  $2\frac{1}{2}$  to 3 m. per second, or 5 to 6 knots per hour—half that of the larger vessel. It would be large enough to carry from 10 to 12 men, and could tow two boatloads of 10 men each. In the latter case, however, it would lose about 1 m. per second in speed. In consequence of the small size of this steamer it could easily be transported as a whole: and if the boiler were taken out could be carried on the shoulders of sixteen or twenty men, or when possible on a suitable waggon.

The question now is, which of these two modes of construction is better adapted to the purposes for which

They could be used in summer on the German rivers, and stored during the winter, ready for immediate use. The cost of such a flotilla would be as follows:—

or £1,500. The flotilla would probably save this sum in the first few days of a war. The German Government, however, is earnestly warned against delaying the construction of these vessels until a war actually breaks out, when the greatest exertions on the part of shipbuilding firms could not ensure their delivery in time for practical service.

# CAPTAIN BAXTER'S PATENT FIELD KITCHENS.



HE latest novelty in cooking apparatus for military and general camping purposes is the field kitchen invented and patented by Captain Baxter, of the Royal Engineers,

As this apparatus is designed on an entirely new principle, and possesses several

features of interest, we propose to give our readers a short account of it.

The object of the invention is to obviate the difficulties usually experienced in cooking in the open air, especially in wet and stormy weather; and as it is at such times that properly cooked meals and hot soup or coffee are most necessary to keep the soldier or traveller in good health, the advantage of a simple, portable, and efficient cooking apparatus cannot be over-estimated.

These field kitchens consist of a number—usually five—of annular kettles or cookers, which are piled one on another when required for use, the inner tubes forming a continuous flue or chimney, in which the combustion of the fuel takes place. A small iron stand, supporting an ordinary cooking pot, is placed on the top, and serves as a damper to regulate the draught, while at the same time it prevents the rain from falling into the fire. As the fuel burns away and falls down more must be put in at the top, some of it being rested on the ledges inside the flue to prevent it falling down too quickly.

The kettles or cookers may be circular or elliptical; in the latter case large openings can be made in the lids, through which the food can be examined and stirred from time to time.

Figs. 7 and 8 show one of the kitchens with elliptical cookers, and the method of placing them across each other, so that the openings may be accessible, is made clear.

This form of kitchen is usually made to cook 225 lbs. of food, sufficient for 100 men, but other sizes can be made.

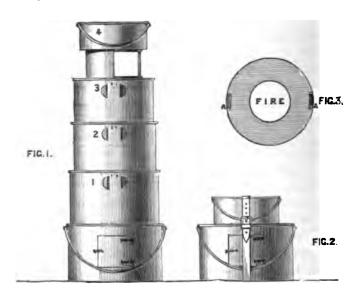
Figs. 4, 5, and 6 show a kitchen with circular kettles—a very strong and simple apparatus; but the holes for inspecting the food are not so large as in the elliptical kettles, although considered by many cooks to be sufficient.

To use the kitchen, a small hole about two feet long, and six inches deep, to admit air to the fire, is all that is necessary; or the kitchen may be raised a few inches on bricks, stones, and pieces of turf.

All the trouble and labour of digging long trenches, and making chimneys, is consequently saved—a matter of great importance to troops often worn out with fatigue and drenched to the skin, especially when the ground is hard or frozen, or when no tools are at hand with which

to dig the trenches. The apparatus also forming its own chimney is independent of the direction of the wind, and the delay in cooking often experienced in consequence of the trench kitchens refusing to "draw," is avoided. Nor is it necessary always to use the whole apparatus: two, three, or four of the kettles may be used, according to the number to be cooked for, while they may be hung over an open fire, or used over a trench (the central opening being stopped up with turf), should for any special reason it be desirable to do so.

The time required for cooking depends on the nature of the food and fuel, and the temperature of the air and water, but under ordinary circumstances 220 pints of water can be raised to the boiling point in twenty-five to thirty minutes, and 225 lbs. of stew cooked in one hour,



the amount of wood averaging 25 to 30 lbs.—about half the quantity required for a trench kitchen.

The weight of a kitchen to cook for 100 men is about 90 lbs., not more than that of the ordinary pots required for the same amount of food. For cavalry, small kettles nine inches in diameter, to cook for three men, are made to fasten to the saddle with a strap.

It will be seen at once that this apparatus possesses numerous advantages; cooking can be commenced without delay, in any weather, and with almost any fuel, the rapid draught produced enabling even very damp wood to be used.

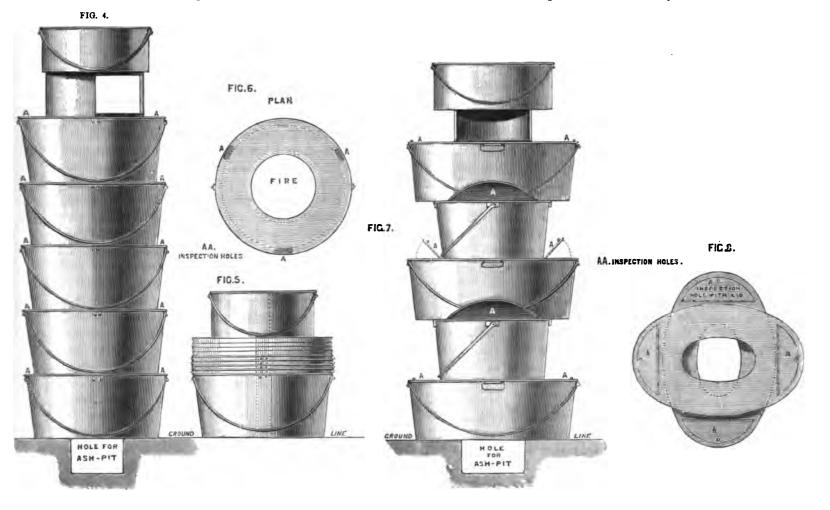
It is, moreover, very simple, and not likely to get out of order, even with the roughest usage, while its portability, economy of fuel, and the facility with which it can be cleaned, recommend it strongly, not only for army and general camping purposes, but also for schools, factories,

barracks, soup kitchens, railway and other contractors, and for all purposes where cooking on a large scale has to be carried on.

Figs. 1, 2 and 3 show the telescopic pattern of kitchen, which has been designed for the use of officers, travellers explorers, sportsmen, bicyclists, and boating parties, and the extremely neat manner in which the kettles nest or pack inside each other renders it particularly compact and portable.

A light steel case is provided into which the "nest" of

A diagram is also given of a large telescopic kitchen now being used by the Telegraph Battalion Royal Engineers in Egypt; the outer case being used as a watertank is omitted, but the manner of packing the annular kettles is clearly shown. This apparatus will cook for sixty men, the dimensions, when packed up, being only fifteen inches diameter, and fourteen inches high, plates, cups, frying-pans, and canisters being also contained in it. Numerous experiments have been made with these kitchens, and in the opinion of all military men who have



kettles fits. When required for use, the kettles are built up on the top of this case, as shown in the woodcut, a hole in the lid, provided with a grate, allowing a supply of air to pass into the fire. The frying-pan and gridiron can be used over the flue, and the outer case may, when necessary, be used as an oven, the kitchen being supported on bricks or stones. These kitchens can be made in all sizes, to cook from five to 200 pints, the smaller sizes being well adapted for methylated spirit or a paraffin lamp, as well as wood or other solid fuel.

seen much active service they are far superior to the ordinary trench kitchens.

When it is remembered what a large proportion of an army in the field is always on the sick-list, in consequence, to a great extent, of the want of properly-cooked food, the great saving in human life and money to be effected by the use of this simple apparatus will be appreciated by all those who take an interest in the efficiency of the army, and the comfort and well-being of the British soldier.

## THE MAXIM AUTOMATIC MACHINE GUN.



HE term automatic has been applied to several forms of machine guns, in which all the functions of loading and firing are performed by operating a lever or crank. Strictly speaking, however, none of these

are automatic guns, because the various functions are performed by machinery operated by hand. The Maxim gun, however, is really an automatic gun, and as far as known, the first automatic gun ever made. All the functions of loading, cocking, firing, extracting the empty shells and expelling them from the gun, are performed by energy derived from the gun itself.

Mr. Maxim has several systems of utilising the energy of the burning powder for operating a gun, among which may be mentioned the following: energy derived from the gases escaping from the muzzle of the gun; from a slight backward motion of the cartridge shell at the instant of firing; from a portion of the cartridge moving backwards; from the elongation of the cartridge; energy derived from the recoil of the whole gun; from the recoil of a portion of the gun; from a small piston connected with the barrel in front of the powder chamber.

The system, however, which is found to be the most serviceable for machine guns is one in which the barrel, the breech block, and the lock participate in the recoil, while the casing or supports of the gun remain stationary.

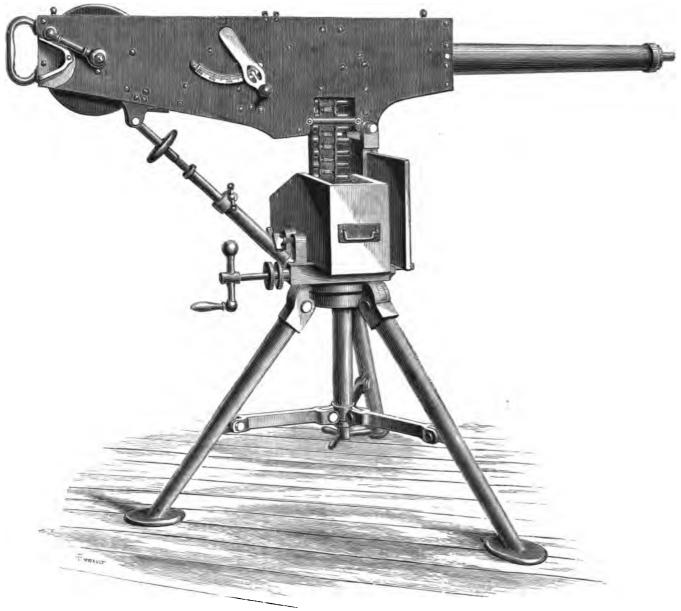
The operation of this gun is as follows: the gun being loaded and supplied with cartridges, the block holds the cartridge firmly into the barrel. If the trigger is pulled the striker explodes the cartridge in the barrel. As the projectile leaves the gun, the barrel, the block and its attachment move backward by the force of the recoil. When they have moved back about half an inch, the block becomes detached from the barrel, while the barrel is stopped in its backward motion at the expense of sending the block backward with accelerated force; in other words, the energy of the barrel is transferred to the block, the barrel stops and the block moves suddenly backwards. The backward motion of the block draws out the empty cartridge shell, moves it to one side, cocks the hammer, and on its return, brings a loaded cartridge in front of the barrel, pushes it home, locks the block to the barrel, moves half an inch forward and pulls the trigger, when the second cartridge explodes and the same cycle of events is constantly repeated. The block is driven back by the recoil of the gun and is brought back into its firing position by a spring, the trigger being placed in such a position that the gun cannot be fired except when both the block and the barrel are moved forward and locked.

The cartridges for supplying the gun are placed in a belt formed of strips of tape one and a half inch wide, and placed in a box or magazine immediately below the gun. One end of this belt of cartridges is introduced into the gun, a little hand crank is then operated a few strokes until the first cartridge is in the barrel of the gun, the gun is then ready for firing. As it is fired, cartridges in the belt are drawn in one by one, pulled out of the belt and the empty belt discharged on one side of the gun near the aperture where the empty shells are discharged. The speed of firing is regulated by a cataract chamber having a variable passage for the fluid to escape past the piston. The valve to control this passage is connected with the trigger lever, so that by pulling the trigger backwards, it is opened more or less according to the position of the trigger. If it is drawn but little backwards, the speed of firing is very slow; if it is drawn back about an inch, it will fire about two hundred shots per minute; while if it is drawn back three inches, it will fire six hundred shots per minute. As the gun is self-contained and as all the energy necessary for its working is derived from the recoil, it will be obvious that it need not be necessarily mounted upon the rigid platform which machine guns nearly always require to hold them stationary, in order that their crank or lever may be operated without also moving the gun. In addition to the advantages of requiring no one to turn a crank or lever, and that of directing a stream of bullets with the facility that a stream from a garden hose may be directed, the gun possesses another, namely, that of having the magazine placed below the gun, and of its size being such that it does not require replenishing as often as the other kinds of machine guns.

When mounted on wheels for service in the field, it is proposed to have the body of the carriage in the form of a box, holding 2,000 cartridges, so that the gunner will be able to fire this number without ever showing any part of his person above the top of the gun. It will be remembered that existing machine guns have their magazine on top, and as it holds but about 100 cartridges, it requires a man's constant attention to keep it replenished. A gun cannot be manipulated handily by the gunners, by one man turning at the crank and two men feeding cartridges into the magazine, all three of these men being above the gun, and serving as a target for the enemy.

It would naturally be supposed that a machine gun which loads and fires itself, would necessarily be more complicated than one in which these functions were performed by hand. This, however, is not strictly the case. The machine gun invented by Mr. Maxim, when considered independent of its peculiar feed, is no more complicated than other systems of single barrel machine guns. If the gun is made with a simple hopper to feed it from the top, or has to depend upon gravity for its feed, and has only a limited number of cartridges in its magazine, it could be made quite as simple as other guns. The extra complication assistants who present a much larger target for the enemy's fire.

Another additional device, which does not appear in other machine guns, is the speed regulator, which enables the officer in charge to determine the maximum speed at which he wishes the gunner to fire, so that the gunner may not in a moment of excitement fire away too many cart-



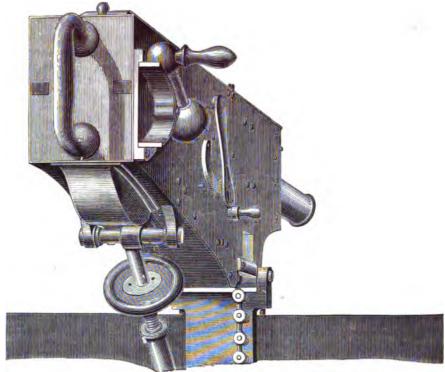
SIDE VIEW.

seemingly apparent in comparison with other guns, is not due to the fact that the Maxim gun loads and fires itself, but rather to the fact that the gun feeds itself from a large magazine below the gun, thus dispensing with the services of at least two assistants to the gunner.

It is believed by Mr. Maxim, that the machinery for performing this very desirable object will be much less likely to become injured in action than would the two ridges, for when a gun is set to fire at a certain speed, it will fire at that speed until the regulator is changed.

Perhaps, however, the greatest advantage that this gun possesses over the ordinary type of machine guns, arises from the fact that hang-fire cartridges which have proved so very disastrous to other guns, do not offer any obstacle to the safe operation of this arm. Perfection does not exist in cartridges.

If all cartridges were absolutely perfect, their contents completely free from moisture, and with no cracks or porous places in their shells, doubtless they would all explode in one-hundredth part of a second after they were struck. But cartridges are not perfect; many of them have moisture in the powder, many have cracks and other defects in their shells; the primers are not always fitted absolutely tight, so that, when cartridges have been made a few months or have been subjected to any exposure outside their original box, some of them soon deteriorate. A slight amount of moisture gathers about the primer inside, and these cartridges do not explode at the instant of being struck. Some little time, perhaps a quarter of a second, elapses from the time they are struck until they explode. These cartridges are called hang-fire cartridges. These These "jams" are always taking place at the critical moment. No matter how perfect the workmanship is, or how strong and simple a gun may be, it is almost sure to be thrown out of action by these slow cartridges, if any attempt is made at rapid firing in a moment of excitement. With the new automatic gun, however, accidents from this source cannot arise. When the cartridge is struck, the breech cannot be opened before the cartridge explodes, because the energy required for opening the breech has to be derived from the explosion of the cartridge itself; so that if the magazine be supplied with cartridges in which there are a few "hang-fires," the perfect cartridges will be fired quickly, and whenever a slow one presents itself the gun will wait for this particular cartridge, and when it does explode, will go on and fire the quick cartridges



REAR VIEW.

"hang fires" exist in considerable quantities among all cartridges.

Suppose a magazine to be supplied with cartridges in which there is only one of these "hang-fires;" the gunner is turning the crank at its highest speed, this cartridge enters the barrel, is struck and instantly before it explodes, the breech is opened and as the cartridge is being drawn out of the barrel, the explosion takes place.

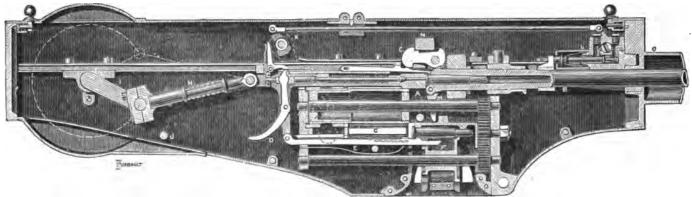
This breaks the shell in two, drives one half of it into the barrel and blows the other half out and sometimes blows up the magazine. If the magazine does not explode, the next rotation of the crank drives a loaded cartridge into the chamber which is already blocked by part of an exploded shell. It cannot enter, and the gun is "jammed." rapidly, and if one fails to go altogether, the action stops and the bad cartridge may be thrown out and the gun restarted by the simple movement of a lever, the time required being about one-half a second.

Cartridges which fail altogether are very scarce, not more than one in 10,000, while in cartridges a year old, there is fully two per cent. which will hang fire.

The maximum speed of 600 rounds per minute relates to guns of rifle calibre; if however the cartridge be twice as long, which would be the case in a gun of an inch and a quarter calibre, the maximum speed of firing would be about 300 per minute, and a six pound shell would fire about 50 or 60 per minute.

In order to understand the length of the necessary

machinery in one of these guns, the proportion is about the same as it is in a Winchester rifle; namely, three and a half times the length of the cartridge used. Of course when a gun is fired at a very high speed, there will be very great heating of the barrel unless some means are provided for removing this heat. This is accomplished in the Maxim gun by surrounding the barrel with a waterjacket, and, as it requires as much heat to evaporate one pound of water as it does to melt five pounds of iron, it pipe. It is thus thrown upward into the air instead of forward to obscure the gunner's view. This apparatus is found to work very well on smoke, but the trouble which Mr. Maxim has to contend with now, is the unburnt powder which escapes from the muzzle. This does not behave like smoke, but as a solid, and refuses to be deflected. This will probably lead to some modification of the cartridge to prevent any solid other than the projectile escaping from the muzzle of the gun.



SIDE VIEW OF ACTION.

will be seen that this system must be very efficacious, and that a small amount of water will carry off an immense amount of heat.

Another attachment to this gun with which Mr. Maxim is at present experimenting, is for deflecting the smoke issuing from the muzzle, so that it will not present an obstacle to the gunner who wishes to keep the enemy covered with the gun.

A device attached to the muzzle of the gun deflects the smoke, and sends it like a jet of steam through a vertical As this gun is not operated by external force, it may be turned in any direction with the greatest facility, while being fired at either a high or a low rate of speed.

Mr. Maxim is at present constructing an automatic machine gun on his principle of utilizing the force of the recoil, on a simpler plan and with fewer parts—a great desideratum. The plans of this gun, for obvious reasons, cannot be shown at present.

#### MORRIS'S AIMING TUBES.

It has been decided by the Admiralty to fit with Morris's aiming tubes the Nordenfeldt machine guns on every ship in the service which possesses these weapons. At some recent trials on Whale Island, seven shots out of eight from a one-inch four-barrel Nordenfeldt fitted with the Morris's tubes struck in two volleys, a one-foot bull's-eye at 200 yards. The Royal Navy can now carry on shooting with their Nordenfeldt machine guns at dummy torpedo boats in

the water, at fighting distances. This is undoubtedly a step in the right direction, and the Admiralty authorities are much to be commended for so practically demonstrating the value of a highly important apparatus. They will shortly follow up this success by applying the principle to the larger nature of machine guns, such as six-pounders, which are at present called "quick-firing" guns.

#### THE SEAMEN'S HOSPITAL.

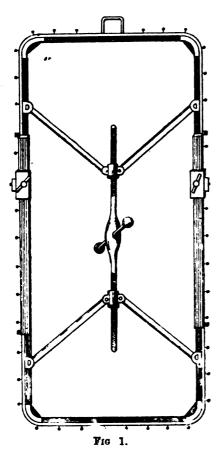
At a Quarterly Court of the Governors of the Seamen's Hospital Society which was held on Friday, the 10th instant, the committee reported that the drainage works, which are being carried on under the supervision of Mr. Rogers Field for the purpose of placing the building in a sanitary condition, are progressing favourably, while the chapel, which is also being built under the direction of Mr. Stephen Salter, is completed externally. The committee had been obliged to sell a further 2,000l. worth of stock to meet this expenditure, contributions in aid of the special fund for drainage improvements and the chapel are therefore urgently needed. During the past quarter,

although the accommodation for the patients has been limited in consequence of the building operations, patients have been received from Austria, Denmark, the East Indies, Finland, France, Germany, Holland, Norway, Sweden, and the United States; while the following British ports have also helped to fill up the beds of this Hospital: Liverpool, Aberdeen, Arbroath, Cardiff, Cork, Dundee, Glasgow, Hartlepool, Hull, and Newcastle. More cosmopolitan claims than those of this charity could not possibly be urged. The monetary requirements of this humane society are strongly recommended to the charital lepublic.

## A NEW FIELD OPERATION TABLE.

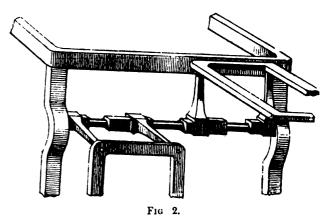
(Translated from Organ der Militär-wissenschaftlichen Vereine.)

This table, which was exhibited at the Hygiene Exhibition in Berlin, is the invention of F, Schwabe, an inhabitant of Moscow. Its upper part consists of a four-sided iron frame (Fig. 1), supported at each corner by uprights of the same material resting on hinges. In order to insure the greatest possible steadiness—perhaps the most important qualification for an invention of this kind—the supports are joined to one another by rungs, and to the frame itself by bars, as shown in Fig. 4. A similar, and of course smaller, frame is intended to support



the head of the patient. This frame can either be lowered on a notched rod, or moved longitudinally on horizontal bars fixed for this purpose on each side of the table. The general construction of the two movable supports for the feet of the patient may be seen from Fig. 2. In packing for transport, these two frames can be turned completely round and attached on hooks provided for the purpose on the inner side of the table. Strong and durable sail-cloth, fastened on buttons to the iron frame, is employed as a covering. The cloth can be stretched to the required tautness by the apparatus shown in Fig. 1, intended to

distend the sides of the frame. The head and foot supports are of course covered with the same material. This



cloth, which can be easily and thoroughly cleansed, is found to be the most satisfactory material for covering the table.



Fig. 3

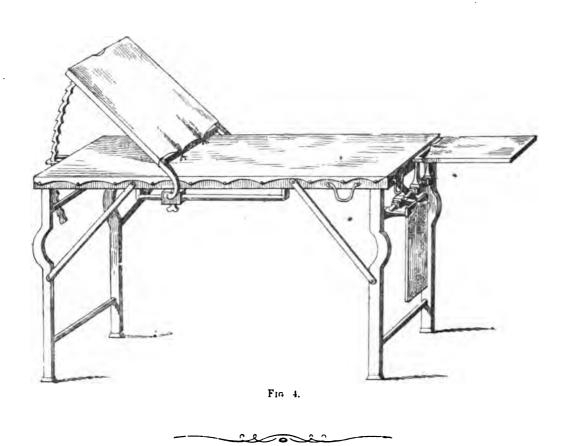
As a number of such coverings can be cut to fit the length and breadth of the frame, replacement is at once expeditious and cheap. The advantages claimed for this invention are shortly the following:—

1. It can be easily packed (Fig. 3), while the space occupied in transport is of the smallest. 2. As each part is minutely connected with the other, the time required to prepare it for use is scarcely noticeable. 3. As the frame is constructed of iron, it affords no refuge to micro-

organisms. 4. It is exceedingly cheap, as all upholstery work is dispensed with.

The table is 164 cm. long, 54 cm. broad, and 88 cm. high.

It is generally believed that this invention will throw all others into the shade.



#### OUR GUN ARMAMENT.

It is necessary that this subject should be for the present held over, for the following reasons. This country is now in a state of preparation for a great and determined war against a powerful nation. The period is not that in which controversy upon the means of supply of war munitions should be carried on. Great Britain wants men, guns, rifles, ammunition, and provisions—in short all the means by which a coming contest may be successfully maintained. How these are to be obtained, now that the immediate necessity for their rapid supply is apparent, is not of such consequence as their production with the utmost swiftness. It is in time of peace that administration should be perfected, so that in time of war, every warlike article should be forthcoming, and be of sound and reliable quality. If, in time of peace, satisfactory arrangements are not established for a time of war, then Great Britain has to pay dearly for the wrong-doing of her officials, and for the neglect or supineness of her greater or lesser administrators. It is a hard assertion to make, but it is true, that a lavish expenditure of British money has had in every

successive war, to make up for lax administrative arrangements in time of peace. The most astounding fact remains, that although this experience has to be thus bought and paid for in nearly all our wars, matters relapse into their former condition as soon as a few years of peace prevail. It is the duty of those who possess the means of doing so, to fearlessly lay bare the actual truth in these periods of peace, in the endeavour to bring about a better state of affairs in relation to a condition of preparedness, so that the nation may not have to pay so heavily for administrative shortcomings. In the period of active preparation for a gigantic struggle with a Power ever grasping to attain the ends by which Great Britain may be deprived of a portion of her territory or threatened with the deepest injury to her interests at home and abroad, the voice of controversy, on the grounds of patriotism alone, should be to a great extent held in abeyance. Therefore, at a more convenient season, the question of the supply of "Our Gun Armament" will be resumed.

## TROUVÉ'S PORTABLE ELECTRIC LANTERNS.

(Translated from Rivista di Artiglicria e Genio.)



HESE lanterns are intended to afford a vivid and instantaneous light without subjecting the user to danger of any description.

They are of two kinds. One type is designed for use in industrial oc-

cupations in which absolute safety is a supreme consideration. The other is adapted to domestic illumination,



affording a substitute, not for the permanent light of the dwelling, but for the small and much more dangerous portable lamps in general use.

According as the former lantern is suspended from one or other of two handles, it is automatically lighted or



extinguished. This arrangement is somewhat varied in the domestic lamp. It is lit instantaneously when suspended from the handle, and is extinguished by pressing the finger on a small knob or stud. The general construction of the two lamps is, however, the same. The electricity is generated from a Trouvé bichromate battery, similar to that submitted to the Academy of Sciences at its sitting of the 19th March, . 1883. The incandescent lamp is inclosed in a crystal bell protected by a metal screen.

By a simple automatic arrangement contact is either interrupted or renewed at the will of the holder, and by this arrangement the lamp is ignited, regulated, or extinguished. Whereas, however, in the industrial lantern the vertical handle is used to separate the elements necessary to generate the electricity, and a lateral hook is employed to unite them, these arrangements are completely reversed in the domestic type. The latter is



provided, for purposes of safety, with a species of parachute, of analogous construction to that of an umbrella, preventing the apparatus from overturning.

The lanterns submitted to the Academy of Sciences had an intensity of light equivalent to five candles, burning for three hours; or to one burning for fifteen hours. This light can, of course, be increased or diminished at will, according to the uses which the lamps are designed to serve.

These lanterns, it is claimed by the inventor, are extremely simple, as manageable as an oil lamp, and can be used with absolute safety in an atmosphere impregnated with the most explosive gases.

#### JAMMED CARTRIDGES AND THE MARTINI-HENRY RIFLE.

The proverb that "the last straw breaks the camel's back" has been exemplified in a dangerous manner in the Soudan. The lives of our gallant young soldiers have been repeatedly placed in jeopardy while engaged in desperate combats with their courageous foes, by their cartridges jamming in the chambers of their rifles. Short of the rifles bursting, nothing more serious could possibly have occurred to shake the confidence of the infantrymen and mounted riflemen in the protective power of their rifles. It is almost needless to say that the strong representations made by the military commanders at the seat of war, have finally brought the authorities at home to the conviction that necessity has no law—that the prejudice, the false economy, and theory which have for so long been rampant with respect to the Martini-Henry and its cartridge, must be made to give way before the law of absolute facts.

The question of whether our soldiers have the best arm in Europe had, just now, better not be discussed. But why the cartridges, which have AT LAST been proved to be faulty and unreliable, and why they have been so long retained to our soldiers' danger, while cartridges of a much superior construction have been for years in use at home and abroad. may well form a subject for the strongest antagonistic remarks. Why have these unreliable cartridges been so long retained, while a far superior cartridge could long since have been placed in our soldiers' pouches? Why were these particular cartridges ever placed in our soldiers' pouches? Why indeed! And thereby hangs a tale, in all its varied details a long one. Why was a rifle with the Martini action adopted for the British service? Thereby hangs another tale, also a long one, to be told in all its aspects. To take the second question first, the reply may be shortened. Because the greater part, if not the whole, of the committee which recommended its adoption were ignorant of every mechanical and almost every other requisite for all that constitutes a thorough soldier's rifle; because several of the most influential members of the committee (the Volunteer element, unfortunately) were prejudiced against every form and make of bolt action-no matter how good this form of action might be-and because they wanted a target shooting arm.

The committee began its duties by incontinently casting out of the competition almost every form of action other than the block system. European Powers, who possessed and held to their bolt systems as the best, showed their high contempt for the supposed superior knowledge and judgment of the committee, by exhaustively experimenting with the Martini-Henry and with its cartridge, and by incontinently casting both aside as inferior to their own. The American Government experts did precisely the same. The committee endeavoured, in other words, to show to this country that the experts of America and of European Powers were really a pack of know-nothings in relation to a soldier's rifle. These experts retaliated by proving that the committee were not so wise as they imagined themselves to be. Now is not the period to shake the confidence of the whole

of the British forces in the reliability of their rifles. Therefore, the mechanical elements in the construction of the Martini-Henry will not be here discussed, or their faults exposed; neither will the reasons for the retention so long of an arm which has not by far answered the expectations of that committee which was responsible for its introduction. It is enough to say, at present, that those foreign governments who were not to be deceived into adopting a rifle or cartridge that would not, in their opinion, answer their soldiers' requirements in the face of the enemy, are now in possession of a form of rifle that can with the utmost rapidity be converted into the most formidable arm of modern warfare, namely, the magazine gun; while this country is landed in the necessity of producing a new form of rifle altogether, the moment foreign governments force upon it the necessity of having the magazine arm. And this necessity will not be so long in coming as some people would try to make us believe.

At present no more will be said about the Martini-Henry. But concerning the jamming cartridges, it is as well to say a few words. "Those who know" remember the first form of cartridge for the Martini action. This action was a long one, and required a long, straight cartridge. The cartridge was extremely weak, and much liable to bend; in fact, if distorted, it could not be pushed into the barrel chamber by thumb force. It might have been imagined that this discovery would have brought home to the minds of the committee one of the inherent defects of the system of action. To men of ordinary mechanical knowledge the discovery would have shown this defect at once. But as no member of the committee possessed this necessary knowledge, and as prejudice seemed to be rampant amongst the members, this discovery did not lead to any alteration in their minds as to the particular form of action upon which they had set their hearts. It was necessary to shorten the cartridge-that was as clear as daylight. Then it was equally clear that both the action and the barrel chamber would also have to be shortened. There was an immediate difficulty apparent. A small-bore arm was evidently a necessity. Therefore the cartridge had to be shortened, yet in such a manner as would enable it to contain the necessary quantity of powder and carry the smallbore bullet. The long cartridge was done for instantly, and another form was necessary. A gunmaker, bore bullet. Mr. Daw, came forward with a form of cartridge which seemed to meet difficulty number one, and showed it to a high War Office official. He was asked to leave it with this official. In good faith he did so, and with the usual result—his idea was adopted by War Office officials without any recognition or remuneration; but the principal features of the new form of cartridge's construction were not adopted, and for interested reasons. These reasons were, for certain purposes, the retention of the principle of the coiled sheet brass and iron flange attached to the cap socket. Mr. Daw's cartridge base was all in one piece. There was no iron cartridge flange to easily tear off or shift sideways for the bell-crank-shaped extractor to slip over it and leave the cartridge sticking in the chamber. Mr. Daw's cartridge was differently crimped over the bullet; so that it would not tightly adhere to the narrow part of the chamber

through the force of the powder-charge, and so be difficult to extract by an extremely weak principle of extractor; in other words, by the slight force caused through the downward pressure of the fore part of a block acted upon through the fulcrum of another lever. The proposition of Mr. Daw was convenient. It gave the opportunity, in a certain direction, to retain the coiled brass sheet cartridge in all its worst features, then generally known as the "Boxer" form of construction. The result was the adoption of the very worst cartridge in all the world. Now comes in the question, was there no other principle of cartridge construction other than the coiled sheet brass form, with its weak holding iron flange? Yes, there was the cartridge proposed by Mr. Daw, who submitted both the shape and the principle of construction. There was the solid drawn principle. Was the solid drawn principle known or submitted previous to the introduction or adoption of the worst cartridge in all the world? Certainly it was.

Solid drawn cartridges were either submitted to the committee or the War Office authorities before the worst cartridge in all the world for the Martini-Henry was under experiment or adopted. And if the solid drawn cartridges had been tried instead of this worst cartridge, months of weary experiments before this latter cartridge could be got to extract at all, would not only have been avoided, but the trial of the solid drawn form would have settled its immediate adoption. But the solid drawn cartridges were

tabooed. Why were they tabooed?

It is perhaps as well that the answer to this question should remain in abeyance. The solid drawn cartridges were not adopted for the Martini-Henry. The ultimate result of prejudice, ignorance, and self-interest we have perceived in danger to the lives of our gallant soldiers in the Soudan in the face of their enemies. The ghastly farce—for it is nothing short of ghastly—is at last played out, and, after several years of the results of misdirection created out of interested motives, the solid drawn cartridges have been ordered to be adopted through a dangerous experience gained in the field. Should this sort of experience ever have been gone through by our soldiers? Certainly not.

What is now the position with reference to the cartridge recently ordered by the War Office for the Martini-Henry, through the occurrences in the Soudan and elsewhere with the coiled sheet brass cartridges? We have the cart exactly before the horse. We have all our rifles chambered to the shortened coiled sheet brass manufacture. We cannot now rebouch and rechamber the rifles in use or in store—we cannot order future Martini-Henry rifles to be chambered for a better shape of cartridge, for that would cause the issue of two forms for the same kind of rifle. We are perforce obliged to make the new solid drawn cartridges to the form of present chambering in the guns. Instead of having a solid drawn cartridge of the nearly straight form, which we might have had in use during the past fifteen years, if the ignorance and prejudice of the Martini-Henry committee and the self-interest of War Office officials had not prevented its adoption, we have had during these years a cartridge which has been a constant source of trouble. We are compelled, fifteen or sixteen years after the committee had the opportunity of adopting a perfect form of solid drawn cartridge, still to have the most unsightly, the heaviest, and the very worst in form, for shooting purposes, of any other Power. There are now being made cartridges of the solid drawn manufacture, containing the same charge of powder, of a form beside which the new Martini-Henry cartridge is indeed at an unfortunate disadvantage.

Who is to blame for all this? Who, indeed, is to answer this awkward question? It is perhaps as well to bury the whole of the disgraceful matter in oblivion, and be thankful that the experience has not come later, when still more numerous and powerful enemies were upon our soldiers when their cartridges jammed in their rifles. It is to be hoped that we shall not hear any more about jammed cartridges, now that the solid drawn form of construction has been ordered. Still, our young soldiers, who are quite unacquainted with the mechanical principles of the construction of the Martini action, must remember to quickly jerk down the under lever, as nothing short of the nearest approach to a downward blow of the fore-end of the breech block will fairly act upon the arms of the extractor, and so get the present form of cartridge out of the chamber after the charge is exploded.

In nearly all the guns not on the block-action system, the extraction is positive and in direct line with the axis of the cartridge and bore, a very powerful form. Again, let any one procure cartridges of foreign armies, and observe their straight or slightly taper form, and how easy their extraction must be, in comparison with that of the one we possess through not adopting the solid drawn form when the Martini-Henry arm was first introduced. Seeing is believing—when the observer is not blinded by prejudice

or self-interested motives.

In conclusion, the subject had better be now finally dismissed (for it is a painful one to continue) in the hope that the present committee on the magazine arm will conduct their duties in an unprejudiced manner. They may rest assured that this country will never again put up with any form of repetition of the past, in relation to the adoption of the best arm and cartridge for the use of the British army and navy.

## DEFECTIVE CAVALRY SWORDS.

A STATEMENT has been passing through the Press that the swords of the cavalry soldiers who are likely to be ordered on active service in case of war with Russia, were found unserviceable in a large proportion when ordered to be sharpened and prepared for use in the field. A committee on swords has been recently at work at the War Office. and there is every reason to believe that the statements made by the Press are quite true. This is a very serious matter at the present juncture of affairs. If the swords in the hands of our cavalry are untrustworthy, so must be the whole of those at present in store for issue, unless we have recently purchased some which can be depended upon by our troops. Just now, the idea that we have not a reliable sword in store, is that which strikes one with a feeling of intense dismay. Whose fault is it? Upon whose head is to rest the responsibility of so disgraceful a state of matters in relation to our condition of preparation at a critical moment? It is indeed always difficult to fix the blame upon the right shoulders. There are so many officials mixed up in transactions connected with the supply of war material, that the moment any fault is discovered in the quality of this material, there is commenced a shifting of responsibility from shoulder to shoulder, until confusion reigns confounded.

How have these swords been suddenly found unservice-

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able, and what were the tests applied to them? And, it may be asked, why were they not discovered to be so before they are urgently required for active use? These are questions of the most serious import and difficult to answer, when it is but too obvious that the consideration of the matter will, under an unfortunate condition of circumstances, have to be set aside and the fearful error remedied with all possible speed.

Some light may be thrown on the manner in which the swords have been found unserviceable by the following

statement.

The swords were obtained from contractors, as all swords are, under certain conditions of manufacture and inspection rigidly drawn up by the expert War Office officials. It will be quite sufficient to state that the swords passed the necessary inspection, to be aware that the contractors satisfactorily carried out their work; for it must not for one moment be allowed that any collusion existed between the Royal Small Arms viewers and the contractors. The personal experience of the writer of these words, distinctly points to the strictest honesty of the Royal Small Arms Department viewers. Therefore, neither contractors nor viewers are at fault. When the cavalry was re-equipped some time since, it was decided that the swords for that arm of the service should be reduced in weight and a little in length, as it was considered they were unnecessarily long and heavy. Those in store ready for issue were dealt with first, and issued. The returned swords were then treated and sent to store. Now, it is necessary when a sword is to be much reduced, to first bring the metal to the soft condition, ready for the grinding process. As soon as it is ground to the requisite dimensions, it must be retempered to its former state, then brought to its condition for use by the polishing bobs. As a matter of fact, whenever a sword is softened after it has once been tempered and finished for use, the operation of softening and retempering is a difficult and delicate one successfully to The retempering especially, requires the accomplish. utmost skill of an excellent sword forgeman. If in quantities, the operation should be supervised by those who have spent the greatest part of their lives in sword manufacture. Where were these cavalry swords treated when they were reduced? At the Royal Small Arms Factory, Enfield Lock, without a doubt. Then comes the question, considering that all cavalry swords are procured by contract, had the Royal Small Arms Factory the necessary experience in sword treatment? This is the crucial question when dealing with the whole matter. Why did not the War Office authorities send the swords to the original makers, with instructions to reduce them to the required dimensions and render them fit for service as they originally were, so that the sword makers should retemper them properly and with the experience of professional men? is another highly important question to have answered, and answered truthfully.

In short, matters at the War Office in respect to the supply of munitions are the reverse of satisfactory. Let us take the case of these swords. Upon whom is the responsibility to be fixed? Who decided to have the cavalry swords operated upon at Enfield Lock? that is to say, how many officials were mixed up in the decision? There is really no responsible head whatever in connection with this or other decisions connected with war material. There is a complete mixture of responsibility, and in the end, no one can be made to bear the blame of a terrible error. The former Board of Ordnance was done away with, and divided responsibility is the present disastrous result. The sooner this Board is reconstructed on a superior footing, the better it will be for Great Britain. The excellence of munitions of war will be better secured, a more reliable administration will be endeavouring to protect the Empire's interests, and upon which direct responsibility can be fixed for errors of omission and commission.

It is well to say a few words respecting the way the swords have been discovered to be defective. The commanding officers of regiments have probably directed their armourer-sergeants to apply the severest tests, in order to protect the lives of the men under their orders when in action against the enemy. The commanding officers have doubtless ordered a block of wood to be procured, and then have directed one of their strongest-armed men to strike the block a direct downward blow with the sword, edge on, then to deliver the same blow with the flat side; further, they may have securely fixed the sword's point, then placed a wooden bridge ten or eleven inches high under the sword's centre of percussion and sprung it down until the hilt came level with the point. These operations would certainly try the swords up to the required test. If the metal was too soft, the sword would remain bent or twisted under either of these tests: if too brittle, the metal would fly. The public should undoubtedly have the benefit of the fullest investigation into the statements made by the Press respecting so serious a subject as that of defective weapons for those soldiers upon whom the country has to rely in the time of danger.

It has been deemed advisable, in the interests of this Magazine, to fill up spaces that may be available through the termination of articles within any particular page with remarks on current naval and military matters of sufficient importance to notice. It often happens that these spaces are limited; sometimes they are enough to allow subjects to be tersely dealt with. The most will be made of these spaces in the direction decided upon.

EDITOR.



# REVIEWS OF BOOKS SUITABLE FOR NAVAL AND MILITARY LIBRARIES.

Current Repentance. A novel, by A. B. C. S. (J. & R. Maxwell.)

This is a clever novel illustrating very felicitously Anglo-Indian life. Those who have never visited India can obtain by its perusal a good idea of how time is passed both in the plains and on the hills. The characters are cleverly drawn, and as the plot is both well-developed and exciting there is no doubt Current Repentance will be largely read in India, while the residents of Asia Minor, both civil and military, cannot fail to discover in the pages scenes and adventures corresponding to their own experience, and when they have finished it will mentally exclaim "babut achai!" To the uninitiated we commend the important chapter dealing with hill stations generally and the singular effect the air there has on all, which the author is good enough to inform us is due to a peculiar kind of ozone existing in it, which is extraordinarily stimulative of the faculties of flirtation. The author says, "this marvellous element has the property of transmuting-perhaps I had better say of electro-plating—everything which comes within its influence, with a gloss of pleasant sentimentality. The very villas and cottages sprinkled about amongst the pine trees and ferns on the slopes (kud) of an Indian hill station always rejoice in poetically suggestive names, as "Fairy Dell," "the Maids Well," "Dove Cot," and "Sabrina Grot." Then again he proceeds to describe its effect on the rosy cheeked Adonis of the Hussars the Orson of the Settlement Department and on the "Old Boys," who "as they plod their way up the hill on their fat Yackundi ponies, are roused to emulation by the fuller crimson on the robins breast, and the lively iris changing on the burnished wing of the jungle cock, or the tail of the painted monal, which flit across their path by the way, and smartening themselves up they let their vagrant fancies lightly turn to thoughts of love.

Those who enjoy a capital novel should read Current Repentance.

On the Track of the Crescent: Erratic Notes from the Piraus to Pesth. By MAJOR E. C. JOHNSON, M.A.I., F.R.Hs.S., &c. Illustrated from Sketches by the

Author. (Hurst and Blackett.)

This is a very interesting book of travels, and although many of the places and scenes visited by the author have often been described before, Major Johnson has succeeded in investing them with a fresh charm due to the possession of a classical pen and an artistic pencil. The illustration of the "Acropolis from Musaius Hill" is a charming drawing and how the author appreciated the subject may be inferred from what he says of it.

"As I watched the marvellous changes of light and colour on this enchanting scene, and drank in the delicious 'champagny' air, I thought of all the changes that these grand old ruins had seen, of all that had passed in this felicitous corner of the earth and of the Titans of intellect who had trod this sacred ground. On this isolated peninsula, blessed with a glorious climate, surrounded by a beautiful and prelific nature, and consequently possessing a bright and fanciful mythology, this favoured people passed in succession and gradual development from the mythic to the heroic and traditional periods, and then to

the historical. From the epic stage of poetry to the lyric, and then to the dramatic, combining both." We could quote many passages to show how impressed the author was with the scenes he visited. Evidencing artistic feeling and classical taste. After visiting Turkey, Bulgaria, Wallachia, the author spent the rest of his time in Hungary and we do not remember to have come across any book which contains so complete an account of the country, its institutions, inhabitants and their modes of life. Nothing is omitted. The author has succeeded in these chapters in portraying both with pen and pencil Hungary and the Hungarians in a manner so truthful and attractive that those readers who delight in books of travel will not fail to inquire for and read On the Track of the Crescent. The highest praise is due to the publishers for the manner in which they have produced the bookbetter wood engravings we have never seen.

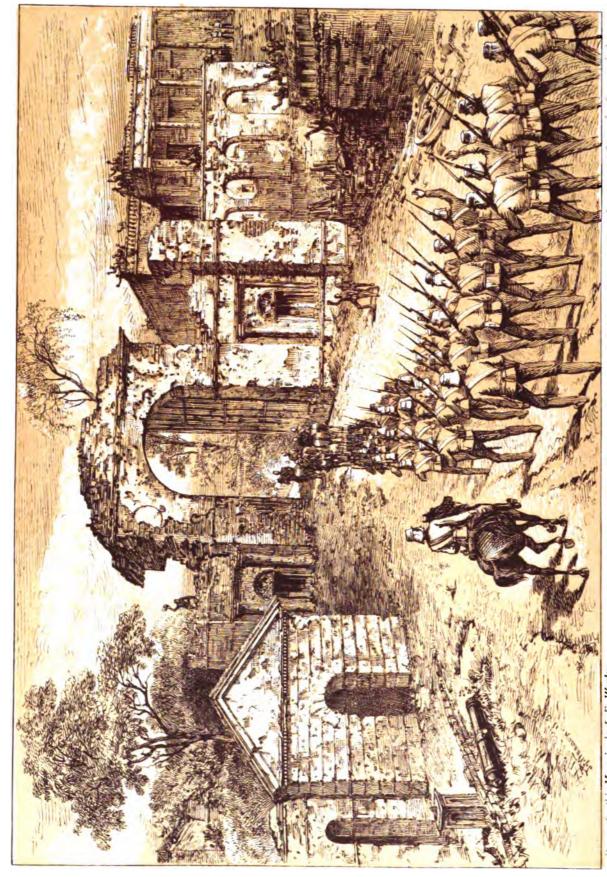
West African Islands. By A. B. Ellis, Major 1st West India Regiment: Author of West African Sketches; The History of the First West Indian Regiment, &c. (London: Chapman and Hall, Limited.)

The author says, "The materials for this work were notes taken during visits made to the principal islands lying off the west coast of Africa, in the course of fifteen voyages to and from south and west Africa, between the years 1871 and 1882." We have no hesitation in stating that the author has successfully completed a volume which will be looked upon as an authority in all matters connected with these islands. In the Chapter on Goree there are some carefully recorded observations on French aggression in western Africa which our government should notice. His remarks on missionaries are both truthful and amusing, although the description of their behaviour is not in accord with the views generally entertained, as they are certainly painted here as being an element of strife rather than a bond of union. Every chapter is carefully written and the author has omitted no topic of interest; whether as regards the aboriginal inhabitants, their prejudices, or the cruel wrongs they have suffered at the hands of the Spanish Government. The chapter in which the ascent of the Peak of Teneriffe is given, is a good account and well worth reading. The best description to give of the book is to say, that it is a comprehensive and pleasantly written gazeteer of the west African islands divested of unnecessary dry details.

Shall Russia have Penjdeh? An account of Russia's intrusion on the great camping-ground known as the key of India. By CHARLES MARVIN, late special correspondent of the Morning Post in the Caspian Region. (London: W. H. Allen and Co., 13, Waterloo Place)

This is a most important and valuable pamphlet by Mr. Charles Marvin, one of the highest authorities on the Russo-Indian question. We strongly advise our readers to study it, as by doing so they will learn the absolute necessity of England not allowing Russia to take up a position on the camping-ground of Herat. As the writer says, "Above all, now we know that the railway from the Caspian is being pushed on towards it with all possible speed, and can be made to reach it in another twelve-month.":

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Drawn for this Magazine by J. F. Weedow.

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GENERAL OUTRAM ENTERING THE DEFENCES OF THE RESIDENCEY, LUCKNOW, ON THE 25th SEPTEMBER 1857. AT THE HEAD OF HAVELOCKS RELIEVING FORCE

# THE

# ILLUSTRATED Aabal and Military Magazine.

No. 12.

JUNE 1st. 1885.

Vol. II.

# OUR FRONTISPIECE.

THE ENTRANCE OF SIR J. OUTRAM WITH HAVELOCK'S RELIEVING FORCE THROUGH BAILLIE GUARD GATEWAY, LUCKNOW.

"The walls were weak; and fast and hot Against them pour'd the ceaseless shot, With unabating fury sent From battery to battlement.
But narrow the way that led to the spot Where still the Christians yielded not.

There is something of pride in the perilous hour Whate'er be the shape in which death may lour; For Fame is there to say who bleeds, And Honour's eye's on daring deeds!"



HE heroic defence of Lucknow under Brigadier Inglis is an episode in history of which Englishmen will be proud to the remotest generations. It is a record of daring and endurance, of courage in its noblest forms, of forti-

tude under suffering and of faith in adversity, which has no parallel in English annals. It brought to light not only the bravery and hardihood of men, but the nerve and unselfish devotion of women. In that tribulation, strength of character came forth as a very glory to humanity. In those hours of adversity none faltered or became faint with despair, although time was "counted by heart-throbs, not by figures on a dial." To borrow a simile from the German Salis, who was a soldier as well as a poet; sorrow, conquered by courage, quickened the souls of the defenders, and graves, overshadowed by the cypress, looked bright beneath the blue of the forget-me-not.

It was indeed a marvellous resistance of a few brave hearts against the power and blood-thirsty fanaticism of thousands. The remnant of a British regiment, her Majesty's 32nd, a company of British artillery and a few hundred sepoys, whose very presence was a subject of distrust, kept at bay all the mutinous force of Oudh for eighty-seven days until the arrival of reinforcements under

Outram and Havelock. The position occupied by the garrison was an open intrenchment, the numbers not sufficient to man the defences, and the supply of artillerymen for the guns most inadequate, yet, as Sir Colin Campbell's despatch went on to say, "the persevering constancy of this small garrison under the watchful command of the Brigadier, has, under Providence, been the means of adding to the prestige of the British army, and of preserving the honour and lives of our countrywomen. There can be no greater reward than such a reflection, and the Commander-in-Chief heartily congratulates Brigadier Inglis and his devoted garrison on that reflection belonging to them." Lord Canning was equally eloquent in his praise of this magnificent defence of a weak and most hazardous position. But perhaps the praise most appreciated by the defenders themselves was that accorded by the gallant Outram — the Bayard of India — whose chivalrous action in waiving his rank in favour of Havelock when speeding to the relief of Lucknow illumines, still further, a page in history already bright with brilliant deeds. After commenting upon the bravery, fortitude, vigilance, and patient endurance of hardships, privation, and fatigue, displayed by the garrison of Lucknow, Sir James Outram added, "The term 'Illustrious' was well and happily applied by a former Governor-General of

India to the garrison of Jellalabad, but some far more laudatory epithet, if such the English language contains, is due to the brave men whom Brigadier Inglis has commanded with undeviating success and untarnished honour; for while the devoted band of heroes, who so nobly maintained the honour of their country's arms under Sir R. Sale, was seldom exposed to actual attack, the Lucknow garrison of inferior strength have, in addition to a series of fierce assaults, gallantly and successfully repulsed, been for three months exposed to a nearly incessant fire from strong and commanding positions, held by an enemy of overwhelming force, possessing powerful artillery, having at their command the whole resources of what was but recently a kingdom, and animated by an insane and blood-thirsty fanaticism."

These words tell briefly but accurately the story of the defence of Lucknow. At the time they were written the whole of the great province of Oudh was in open rebellion, and it seemed little short of a miracle that the small garrison of Lucknow should have held its own in the face of such terrific odds. But it did so, and the enemy, notwithstanding perpetual assaults and mining operations, were unable to penetrate behind the slender intrenchments. Not a single post of the defenders was carried.

Of these posts one of the most exposed and most important was that of the Baillie Guard, the gateway of which is depicted in the drawing which forms the frontispiece to this number of the magazine. It was held thoughout the entire siege by a band of faithful sepoys of the 13th Regiment of Native Infantry under Lieutenant Aitkenan officer whose coolness and courage were proverbial. It was written of him that no amount of fire could ruffle his imperturbable good humour and sang-froid, and he imparted some portion of his own disposition to his sepoys, who cared as little for musketry, round shot and shell, as their jovial commander himself. The Baillie Guard, which owes its cognomen to Colonel Baillie, a former resident of Lucknow, is situated at the entrance into the residency in which Sir Henry Lawrence made his head-quarters, and in which he met his death wound. The building on the right is the treasury, a fact which was well-known to the sepovs who had often assisted in guarding it; and hence their desperate efforts to storm the place. To take the Baillie Guard was, in their opinion, to carry the whole position; and at last the entire line of defences was included in the general name of the Baillie Guard. Close by the gateway was placed an 18-pounder which had to do work against a 32-pounder of the enemy, about 150 yards distant. Fortunately the rebels generally fired at the tops of the houses in the hope of killing individual marksmen. Their guns would have been much more destructive 400 vards distant. They had not sense to perceive that if they battered to pieces the lower story of a building the upper must inevitably fall with it, and so they directed their shots chiefly against the tops from which they

experienced the most mischief, and the shattered and ruined condition of which is a sufficient proof of the accuracy and precision with which they served their guns; though from their extreme proximity and the elevation with which they were compelled to fire, many balls went over the post for which they were intended and fell into the enemy's own intrenchments.

The archway itself is the principle entrance into the residency, and it was through it that on the evening of the 25th September, 1857, the first relieving column marched with Outram at its head, who was the first man who entered.

The building behind the gateway and to the left of the treasury is the house which was occupied by Dr. Fayrer, the Civil Surgeon (now Sir Joseph Fayrer of the India Office). It was to this house that Sir Henry Lawrence was removed after he received his death wound in the residency, and here he breathed his last. Owing to the fact of his having been carried thither, the place subsequently became a special mark for the round shot and bullets of the enemy.

But a more exposed position was the hospital itself, which was situated between the Baillie Guard Gateway and the residency, about fifty yards from each. Round shot and shell crashed into it from all sides, and the upper story was in a few days rendered entirely untenable. The sick and wounded were then placed in the basement rooms, where, owing to the confined space for the numbers, many died who otherwise might have recovered. But even this lower story was not secure from round shot and musketry. The sufferers were constantly shot on their beds. In fact there was no spot, either in this sanctuary or throughout the entire defences, where a dying soldier, or an ailing woman or child could feel free from danger. One who took part in the gallant defence wrote that, "no murmur, no grumbling was ever heard. If there was any complaint it was that the sufferer had been incapacitated from taking further part in the desperate and holy struggle. If there was any expression of regret it was that his fall had entailed additional duty upon his remaining comrades."

With such feelings animating all ranks from the general to the soldier, they held the position till death or rescue came.

The rescue came, but death had been busy, for half the little garrison had fallen killed, wounded, or sick, before the cheers of Havelock's advancing column told the defenders of the Baillie Guard Gateway, that relief had come and Lucknow was saved.

That beautiful city now boasts of prosperity and peace, and its gardens and palaces are bright in the summer sunshine, but more attractive to English eyes and dearer to English hearts are the battered ruins, which mark the posts of the enfeebled position which was so tenaciously held by those who, like Henry Lawrence, "tried to do their duty."

# THE REBELLION IN THE NORTH-WEST TERRITORIES; AND THE MILITARY RESOURCES OF CANADA.

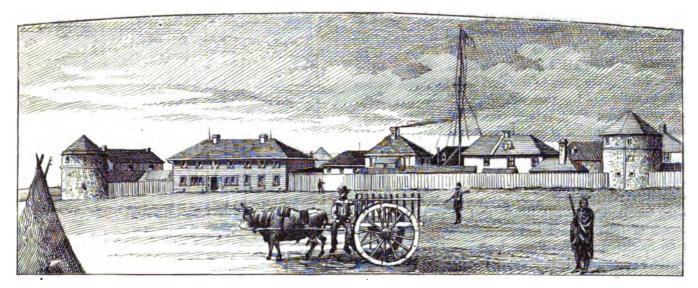
BY THE REV. W. HENRY COOPER, F.R.G.S., CANON OF SASKATCHEWAN. (LATE 2nd KING'S OWN STAFFORD REGIMENT.)



MONG the many important questions that the Government of Canada has been called upon to solve in connection with the settlement of the North-West Territories, none have arisen entailing greater responsibilities, or presenting more strik-

ing features of difficulty, than that of how to deal fairly with the Indians, satisfying their just demands and gaining their goodwill, so as to render them not only contented but prosperous and self-supporting, yet, at the same time, to promote the settlement of the vast area of fertile land in the north-west, and to give security of life and property to English settlers.

had an almost entire monopoly of trading in this vast region, and it was certainly its interest to keep the country as much as possible in its primitive state, and to discourage immigration and settlement. Although the officers of the Company must have known how exceedingly fertile the land was, the secret of its rich and deep alluvial soil and its millions of acres of well-watered pasturage was well kept, and the general impression on the mind of the public at home was that British North America was a barren and desert region, its frosts and snows making it a second Siberia, abounding, no doubt, in buffalo, bear, beaver, and other fur-producing animals, but only fit for Indian trappers, hunters, or convicts to live in. The organisation



FORT GARRY IN 1870.

The limits of one article will not allow me to do more than touch briefly on the several points that are necessary to the understanding of the question, and of the exceptional difficulties the Dominion Government have had to meet the means by which it has earnestly endeavoured to inaugurate and carry out a policy alike acceptable to the Indians, by securing their just rights, and to the settler, by establishing a reign of law and government, rendering the property of the immigrant as secure as it would be in England.

The great tract of country lying between Lake Superior and the Rocky Mountains, now called the North-West Territories, was, until the year 1869, generally known as the Hudson's Bay Territory. For many years this company

of the Hudson's Bay Company was very perfect, its trading posts and forts were to be found throughout the whole country, extending from ocean to ocean, and as far north as the Arctic Sea.

The Company always cultivated friendly relations with the Indians, and by fair dealing and careful regard for the peculiarities of their character, their habits and modes of life, won, not only the confidence, but the affection and esteem of the tribes.

In 1869 the Hudson's Bay Company entered into arrangements with the Imperial Government for the transfer of their territorial rights, for which they received a consideration of three hundred thousand pounds, and a gift of two sections of 640 acres each in every township of

thirty-six square miles in their territory. By this conveyance the sway of the Hudson Bay Company came to an end, and the Crown, having subsequently effected a further transfer of the country to the Dominion Government, the Indian and half-breed mind became disturbed, naturally fearing that the threatened influx of settlers would drive them from their hunting grounds, and that they would see the land which they knew to be theirs parcelled out amongst strangers. This feeling of distrust culminated in a general rising of the French half-breeds, under the leadership of Louis Riel, who has been described as "a man possessing many of the attributes suited to the leadership of parties, and quite certain to rise to the surface in any time of political disturbance."

A great deal more has been made of the so-called Red River Rebellion than the facts warranted. At first Riel succeeded in attracting a following of five or six hundred men, and, taking possession of Fort Garry, proclaimed himself President, having expelled the Canadian governor of the territory. He and his followers lived for several months upon provisions plundered from the Hudson's Bay Company, scenes of riot and drunkenness were common, and the complete demoralisation of the rebels ensued, so that, on the arrival of Colonel, now Lord Wolseley, with his expeditionary force at the end of August, 1870. "President" Riel, his ministers and army beat a hasty retreat, leaving the gates of the Fort open for the victorious forces to enter. In less than a fortnight the regular troops had commenced their return march to Lower Canada, leaving two regiments of militia as a temporary garrison. And thus ended the Red River Rebellion of 1870.

From that time until the occurrences of the last few months, owing to the wise provisions made by the Dominion Government, there has been no disturbance of any moment among the Indians or half-breeds, and, so recently as the summer of 1883, when I had an opportunity of visiting, on an official tour, the different places that have been brought so prominently into notice in connection with the present rebellion, I was able to drive over one thousand miles through the provinces of Saskatchewan and Alberta without either guide or escort. Accompanied only by an English friend, who looked after the camp and cooking, we were frequently days without seeing a white man, and at night camped in the vicinity of Indian tribes, but were not in any way molested; and, notwithstanding the red man's fondness for horse-flesh and other valuables, no attempt was ever made to interfere with our property.

Leaving the Canadian Pacific Railway at Qu'Appelle, where I procured my outfit, consisting of buckboard, Montana horses and camping equipage, with a supply of food for a fortnight, we drove to Fort Qu'Appelle, nineteen miles from the railway station, over a beautiful undulating prairie country, lightly wooded. The Fort is situated on the bank of the Qu'Appelle River, and is surrounded by a small settlement of some fifty houses. It had originally

been the headquarters of the North-West Mounted Police and their barracks on the riverside were unoccupied; Regina, the capital of the North-West, being now the headquarters of the force, which consists of about 500 all told, officers and men.

This corps is the standing army of the North-West Territories, and is scattered in detachments over the country; there are twenty-four stations, the distribution of the force at the different posts being necessarily regulated by the circumstances that may prevail in each district.

The following is the distribution state on January 1st, 1884:—

#### NORTH-WEST MOUNTED POLICE.

Distribution State of the Force, compiled from Returns, 1st January, 1884.

Division.	Station.	Officers.				Ser- geants.					Divi-	·	
		Commandant.	Superintendents.	Inspectors.	Surgeons.	Assist. Surgeons	Staff.	Duty.	Corporals.	Constables.	Total.	Total Strength of Divi-	Remarks.
<b>A</b> {	Maple Creek Medicine Hat		1	i		1	4	8	3 1	43 14	55) 17	72	
B	Regina	1	2	1	i		7	1	5 1 1  1 1	114 1 4 2 2 5	140 2 5 2 8 1	162	Head Quarter
<b>c</b>	Fort Macleod Stand Off Kootenay Pincher Creek Piegan Reserve .	•••	1	2		•••	3  	5   1	3 1 1 	64 9 9 9 9	78 3 4 2 2 3	92	   
D {	St. Mary's Battleford Fort Pitt Prince Albert Ft. Saskatchewan	::	  1	1 1 1 7	  		2  1	1  1 1	3 1 1	35 24 9 21	42 26 11 26	105	
E {	Calgary. End of C. P. R. Padmore The Gap	•••	1	2 	•••	1 	 	1	5 1	8 8 8	76 4 4 3	87	
	Total strength	1	6	13	1	2	20	 25	31	419	518	518.	

Colonel A. G. Irvine, the Commandant, receives \$2,600; the assistant commissioner (now vacant), \$1,600; superintendents, \$1,400; inspectors, \$1,000; surgeons and assistant surgeons, \$1,400; veterinary surgeon, \$1,000, per annum: staff-constables, \$1.50; other non-commissioned officers, \$1; constables, 75 cents; artisans (working pay) 50 cents, per diem. All ranks receive rations.

The uniform of the corps is scarlet tunic with blue facings, overalls with wide stripe, boots and spurs, a white helmet for summer, and a busby for winter wear; the accoutrements are buff leather. Each constable is armed with a Winchester repeating carbine and a six-chambered revolver, officers and non-commissioned officers alone having swords. The officers' uniform is very richly braided with gold, the tunic being similar to that worn by Hussar corps, except that it is scarlet instead of blue.

The ordinary police duties of giving assistance to the Indian Department, providing escorts for the parties con-

veying money to the various Indian agents, preventing cattle-killing and horse-stealing by the Indians, quelling the not infrequent disturbances on the part of railway workmen—in one special case rendering great service to the Canadian Pacific Company—guarding against the spread of prairie and forest fires, excise duties in the prevention of smuggling, and many of the details of a cavalry corps, besides fatigue duty on the farms attached to the stations, give this most useful and efficient body of men ample employment.

They are fairly mounted, and go through foot and mounted drill as well as could be expected from men who have such multifarious duties to perform, and who are scattered in such small detachments.

It would be well if some improvement were made in the manner of appointing and promoting the officers; the

Lieutenant-Governor of the North-West has virtually the patronage in his own hands, and I heard many complaints of the mode in which it was exercised.

It is under the consideration of the Government to increase the force to 1,000 men; a very necessary provision for the protection of the largely increasing number of settlers in the territory.

A short sketch of my run through the Great North-West,

will give some idea of the country and its present condition.

Having concluded all preparations for our journey, we started from Fort Qu'Appelle on a glorious afternoon in July, and in a few minutes reached the foot of the spur leading to the prairie level, and slowly zig-zagged up the steep terrace, passing through an encampment of some hundreds of Cree Indians who had assembled to hold their annual sun and medicine dances, for which they had made most extensive preparations.

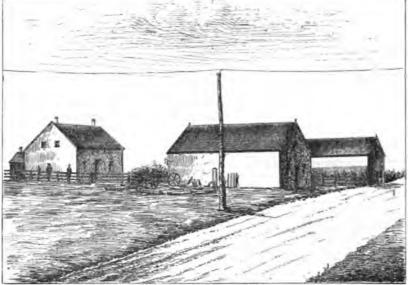
After two days' drive through a rolling prairie, broken by groves of poplar with an undergrowth of willows, and a number of small lakes, we reached the Touchwood Hills a Hudson's Bay Company trading post, seventy miles from the railway. The next twenty-eight miles ran through a most picturesque country, the trail passing a succession of small lakes, at different levels. As we ascended hill after hill the view became more extensive and beautiful.

From the highest point, which my barometer gave as 2,500 feet above the sea-level, from twenty to thirty lakes—large and small—were in view, many of them fringed to the water's edge with small poplars and aspens, these miniature forests adding to the variety of the prospect Descending the western slope of the Touchwood Hills the country gradually became tamer, until we reached the edge of the great Salt Plain, a perfectly flat and treeless prairie thirty miles across, in the very centre of which we had the bad fortune to be obliged to camp one night, luckily we had brought wood for our fire, but, unluckily, were unable to make tea, the water being so very salt.

Forty miles' drive from the western edge of the alkali plain, and through a very easy country to travel in, took

us to Humbolt, a mail and telegraph station, about 165 miles fromCanadian Pacific Railway. The Government buildings consisted of wretched shanty. outside which the staff, an operator and a line repairer, were sitting, each with a portable "smudge" in an old tin can under his nose, for the mosquitos were on the "war path" with a vengeance.

Twenty-three miles of a bare but well-watered



Touchwood Hills, Hudson Bay Company's Trading Post.

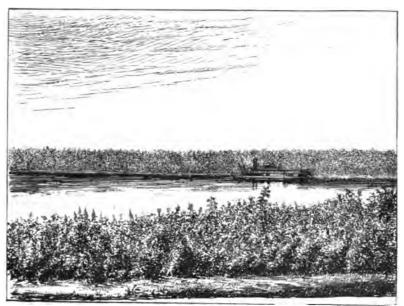
prairie, and some five and forty through a broken and timbered country, brought us to the south branch of the Saskatchewan, which is, at the crossing place, about 500 yards wide. A half-breed, living on the bank of the river, put us across in a very rough punt, and, ascending the steep terrace at the north side, we found ourselves for the first time in an extensive pine forest. For ten miles the trail was through the pines, and then the beautiful country round Prince Albert opened out. On Saturday night we slept under a roof for the first time for a fortnight, on our buffalo robes on the floor of a farmer's house, and making an early start on Sunday morning, arrived at Prince Albert about 3 P.M., having driven the 270 miles from Qu'Appelle in twelve days, which, considering that the horses had to feed themselves, and that they had 700 miles more to travel the next six weeks, was not bad.

Prince Albert is a very prettily situated settlement on the north branch of the Saskatchewan; it is the Hudson's Bay Company's principal trading post in the north-west.

Chief factor the Hon. Laurence Clark is a worthy representative of the Company, and a very influential man. Not that its officers are the great men now they were in olden days; the shopkeeping element has in a great measure superseded the trading for furs, and the old kings of the country are now reduced to the condition of store-keepers, competing with any adventurer who starts an opposition shop. Prince Albert has not yet been dignified with the name of a city, although it has its cathedral, its university, and college, all very primitive, but still the beginnings of what in a few years will have grown into large and important organisations. No account of the North-West would be complete without some mention of

the Bishop of Saskatchewan, most zealous missionary, the most energetic bishop, and the most successful beggar on the colonial bench, and I don't know any man more deserving of support than the good bishop of the second largest diocese in the world.

Carlton House, or Fort Carlton, is two days' drive, one of them through a pine forest, from Prince Albert. The Fort is under the high bank of the



CLARKE'S CROSSING, SASKATCHEWAN RIVER.

river, and is a large square inclosure with wood palisades and bastions. Formerly the wooden walls were twenty feet high, but at the time of my visit they had been cut down to ten or twelve, as no one anticipated another Indian rising. It was from Fort Carlton that Major Crozier and Captain Moore, with one hundred men, marched, on the 25th of last March, to attempt the recovery of the supplies the rebels had taken possession of at Hobart. The line of march led across the reserve of Chief Beardy, where an encounter took place, which resulted in the dispersal of the rebels, but not without a loss of twelve policemen and volunteers killed and fifteen wounded. The Fort has since been burned down to prevent its being taken possession of by the rebels. This was the first collision between the rebels and the police.

There are two trails from Carlton to Battleford—the

river trail and the plain or outer trail. I chose the former as it is only 112 miles, which is fifteen shorter than the other. A more wearisome and depressing drive it would be impossible to imagine; miles and miles—they seemed endless—over flat plains without a tree or undulation to break the monotony of the scene, a few buffalo bones, here and there, bleaching on the prairie, but beyond this no indication that these vast regions were or had ever been inhabited by any living animal.

Arrived at Battleford, four days after leaving Carlton, we were most hospitably received by the inhabitants, and when it was known in the settlement that I had my "permit" with me, that is, a few bottles of whisky for use on the journey, the number of callers was rather startling. Battleford at one time had been the capital of the North-West, and its inhabitants were very sore indeed

when the seat of the provincial government was removed to Regina; still the settlement was an official centre — a live judge, a troop of North-West Mounted Police, an uninhabited Government House (since converted into an industrial school for Indian boys) gave the place an air of some importance. The buildings on the left bank of the Battle River are the Hudson's Bay Company's

stores and trading post; these and all the houses of the settlers that are shown in the drawing were destroyed by the Indians on March 30th, and the next day the Stonies and Crees on the Eagle Hills reserve, some twenty miles from Battleford, killed two farm instructors, and two others, supposed to be settlers, and stealing horses, wagons, and loads, marched to join Big Bear and the Fort Pitt tribes. The inhabitants of the settlement had all retired to the Police Barracks, where they had arms, ammunition and food to enable them to sustain a three months' siege.

The Police Barracks on the right of the river form a strong position, the quarters and stables being surrounded by heavy wooden palisades loop-holed. I had an opportunity during my visit of seeing the troop of the North-West Police quartered there, on parade. Through the courtesy of Captain Antrobus, who was then in command, I was invited

to walk through the ranks and inspect the arms and accoutrements of the men. I formed a very favourable opinion of the troop. The carbines and revolvers were in excellent order, and the appearance of the men was smart and soldierlike. A little more setting up drill would not have been amiss, but the various and necessary duties that had to be performed by the force took up so much time there was very little left for drill.

During my stay at Battleford I had an opportunity of going thoroughly into the Indian question, and making personal observations as to the way in which the Dominion Government was carrying out the treaties it had entered into with the different tribes in the north-west. I first paid a visit to the disaffected chief "Big Bear," who with his band had camped about half a mile from the settlement, and who had sent a message to the Indian officer

that he would not move until his demands had been complied with. "Big Bear" had refused up to this time to sign the treaty; he had always been discontented and troublesome, and I found him very ready to tell me his grievances and to denounce Lieutenant-Governor Dewdney, whom he accused of having made many promises to his tribe and of having inbroken variably them. Although



PRINCE ALBERT, SASKATCHEWAN RIVER, NORTH BRANCH.

"Big Bear's" statements were exaggerated, I afterwards learned there was some truth in them, and that Mr. Dewdney's method of carrying out his instructions was not approved of by either whites or Indians.

"Big Bear" is not a very influential chief, his band does not number more than fifty "braves"; when I visited him he was reclining on a kind of couch in his lodge; his clothing was scant—a waist-cloth and green blanket. Round the inside of the lodge were a dozen of his "young men" in all the pomp of warpaint, feathers, embroidered blankets, moccassins and leggings; all were armed with repeating rifles, the stocks of which were covered with patterns in brass-headed nails. The scene was a remarkable and picturesque one, and I could not help feeling, as I listened to the Big Bear's impassioned account of his wrongs, some

sympathy with the red men whose hunting-grounds were being "settled up" by immigrants, and who spoke of themselves as almost strangers in their own land. To enforce the relation of his grievances, the "Big Bear" in a theatrical manner, pointed to some roots of wild turnips lying on the ground at his side: "There," said he, "is the food my white brothers have driven me and my young men to live on." I afterwards learned what a very big liar the "Big Bear" was, for rations of flour, tea, and bacon, had been sent him from the Government stores that very morning, and a supply of beef for his whole band had been promised as soon as he had moved his camp twelve miles from Battleford.

There is a very marked difference in the way the Indians have been treated in the United States and in Canada, and the contrast is altogether in favour of the

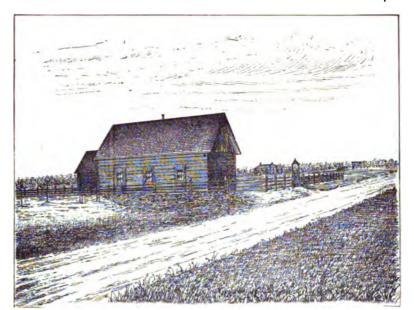
> Dominion Government. From the year 1870, seven treaties have been concluded with the Indians inhabiting the north-west territories. And every opportunity given to the chiefs and head men of the different tribes to state their views and to make their claims. Many of the conferences lasted for days, and generally ended in mutual concessions being made by the Indians and the representatives of the Government.

The Indian tribes, six in number, that inhabit the immense tract of country between Lake Superior and the Rocky Mountains, are estimated at about 40,000. They consist of (1) Ojibbewas or Chippawas, who are also called Saulteaux; (2) Crees, of which there are three tribes, Plain, Wood, and Swampy; (3) Blackfeet; (4) Chippawayans or Northerners, of these there are but a few; (5) Assiniboines or Stonies, and (6) Sioux, who are refugees from the United States. Although their settling in the Canadian territory was looked on at first with some apprehension, the Sioux, notwithstanding their warlike character, have been peaceable and easily satisfied.

These six Indian nations, for they are quite distinct from each other, speak different languages, and have little in common; many of them have been bitter enemies until the last few years. With each tribe a separate treaty was made;

these treaties were signed on behalf of the Indians by their chiefs, and on behalf of the Government by the Commissioner; the carrying out of these treaties was intrusted to an Indian Department. There are a few minor differences in the provisions of the several treaties, but the principal and important points are :- That the Indians relinquished all right and title to the region from Lake Superior to the Rockies, except to certain reserves set apart for their sole use and benefit, upon which no white man is allowed to settle. These reserves are very large and are generally well chosen, the chiefs being allowed to select land to the extent of 640 acres for each family of five persons. The Indians also retain liberty to hunt and fish in all parts of the territory not settled. An annual payment of \$25 is made to each chief, \$15 to each head man or councillor, of which there are generally four in every band, and to every

man, woman, and child, an annual payment of \$5. In large families this amounts to a considerable sum. The chiefs and councillors further receive suits of official uniform once every three years, and a British flag and silver medal is presented to each chief. Then on every reserve, to encourage the Indians to settle, and teach them to farm, one or more agricultural instructors are placed. Oxen, cattle, implements,



THE CATHEDRAL OF SASKATCHEWAN AND EMANUEL COLLEGE.

and seed, are given according to the strength of the tribe, and in many instances the men are paid \$1 a day to induce them to work on their own farms! Rations of flour, tea, and bacon, are also served out free of charge, when necessary, twine for making nets, ammunition, and in some cases guns are given out in large quantities every year. There are many other minor privileges accorded to the Indians, but those I have enumerated will show that the Dominion Government has been actuated by a desire to do justice to the red man, to help him to settle down upon his extensive reserves, and, by teaching him to till his land, induce him to become in a few years self-supporting. Nor is the Government careless about the education of the Indians. Schools are established on every reserve when desired, and several industrial schools for the training of boys and girls have been placed under the management of clergymen of the various religious bodies.

In addition to the 40,000 Indians in the north-west, there are a large number of English, Scotch, and French half-breeds, the latter being greatly in the majority. The English and Scotch "breeds" are generally members of the Church of England, the French metis is always a Roman Catholic. This will account for some of the demands made upon the Government, one being that a nunnery school should be established upon each half-breed settlement and also for the sympathy with the rebels shown by the French Canadians in Lower Canada.

In the North-West proper the French half-breeds do not number more than 600 families, and they may be divided into three classes; (1) those who have farms and homes and who do the principal freighting through the

country, many of whom are very well - to - do and make a great deal of money in carrying goods at the high rates that have hitherto prevailed; (2) those living with the Indians and thoroughly identified with them: and (3) those who live by hunting and fishing as Indians, but keep themselves separate. All the halfbreeds who sign the treaties are allowed to have the same privileges

and annuities as the full-blooded Indians.

The question that will naturally be asked when the nature of the seven treaties and the character of the people with whom they have been made have been examined, is, How has the Government carried out its promises? From very close observation during a drive of 1,000 miles through the territory that is now the scene of the rebellion I have no hesitation in saying that on the whole the provisions of the treaties have been faithfully kept by the Dominion Government, and I have no doubt that, with a firm and judicious administration of the affairs of the Indian Department, there may not be any fear of either disaffection or rebellion. In a few instances the farm instructors did not use the Indians well, and made as much as possible out of the Government stores; but upon these matters being brought before the

able and energetic Indian Inspector, Mr. Wandsworth, in every case justice was done. It is of the greatest importance that the Indians should have full trust in the truthfulness of those who are appointed to administer their affairs, and the Dominion Government is bound to appoint men in whom the Indians have confidence to carry out the provisions of the treaties, and they must also be men who are above suspicion and who will scorn to abuse their position to benefit themselves; and above all let us have Christianity and civilisation to leaven the mass of paganism and ignorance, and thus, having made wise and just treaties, by scrupulously adhering to our engagements, by appointing men of the highest character to carry them out, and by attending to their education and civilisation, Canada will feel that she has done her duty to the red man of the North-West and thereby to herself.

After a very pleasant visit of four days I left Battleford and visited, en route to Fort Pitt, the reserve of Moosimin, a magnificent specimen of an Indian, and so like a Maori that if I had met him in New Zealand I should have at once said "Tenakua." On his reserve there were same fine paddocks of wheat and potatoes, and a number of comfortable wooden houses for his tribe. Moosi-



BATTLEFORD, ON BATTLE RIVER.

min told me he was quite satisfied with the way he was treated by the Queen Mother, and that he was very happy. There was a school on the reserve. The mistress told me she found it difficult to get the Indians to send their children to school.

Four days' drive covered the ninety-five miles from Battleford to Fort Pitt, which is situated on the north bank of the Sackatchewan. The river is here about a quarter of a mile wide, and as there is no punt we crossed in a small boat, swimming the horses. The so-called Fort has no pretence even to being fortified, the palisades having been lowered and in some places entirely taken away.

After a couple of days' rest to spell the horses, during which time we were hospitably lodged and regaled on Moosedeer beef by the officer in charge, we started for Victoria, a settlement of twenty families of English half-breeds, who have taken up farms in the vicinity of the Hudson's Bay Company's old trading port, now given up by the Company. The Saskatchewan river at Victoria reaches its most northern point, and our course to Edmonton (seventy-five miles) was in a south-westerly direction, and through the most fertile and admirably-adapted country for settlement it is possible to imagine. Wood and water were to be found in plenty, and miles of beautiful meadow land stretched on all sides. There is a considerable number of whites, as well as half-breeds, in and around Edmonton, and the Fort, on a high terrace 100 feet above the river, stands in the middle of the settlement, and, with its loopholed towers and high stockades, has more the appearance of a strong military post than any of the other Hudson's Bay Company's forts I had visited.

Having driven the same horses 800 miles since leaving

Qu'Appelle I was here obliged to hire a team to do the last 200 miles of my journey. From Edmonton to Calgary the trail runs south, parallel with the Rocky Mountains, through a rich and beautiful territory, into which settlers were beginning to penetrate. Four and a half days' travelling, from early dawn to late at night, and we arrived at Calgary, then the terminus of the Canadian Pacific Railway,

thus completing a most interesting journey of 1,000 miles in less than two months, without a guide and with no companion but my young English friend.

The vast extent of the North-West territories and the isolated position of the settlements have no doubt greatly increased the difficulty of checking the present rebellion. At the same time the ignorance of the English public as to the geography and circumstances of the country, as well as a magnified idea of the resources and numbers of Riel's followers, have led people to regard what is really an insignificant rising almost as if it were of the same extent and importance as the Indian Mutiny. The short account of my journey will show that there are no physical difficulties in the way of moving troops from one part of the country to another, and that with the exception of a few bands of disaffected Indians, the tribes are loyal to the

Great Mother. With an increased force of North-West Mounted Police, and a more perfect militia organisation, it is not probable that we shall ever again hear of a rising in North-West Canada.

A brief notice of the constitution and strength of the local forces of Canada will show that the Dominion Government has been alive to the necessity for providing for such exigencies as the present. At the same time it will be apparent that a large force on paper is a very different thing from an efficient and well-organised force ready at any time to undertake active service.

Each arm of the service—cavalry, artillery and engineers, and infantry—is represented in the Canadian Militia, the constitutional force of the country, numbering in the aggregate, according to the following official return, 37,063 of all ranks, distributed through the Dominion, which is divided into twelve military districts:—

BETT TOTAL	_DOMINION	ATT CLINE TO

Province.	District.	Cavalry.	Field Artillery.	Garrison Artillery.	Engineers.	Infantry.	Total District.	Total Province.
Ontario	1 2 3 4 5	187 418 829 83 417	240 240 160 160 240	45 112 45 45 847	  	4,024 5,502 2,967 2,175 4,358	4,496 6,272 8,501 2,463 5,451	- 16,782
Quebec	6 7 8 9	96	80	270		2,430 8,585	2,480	11,912
New Brunswick	8	324	160	260	45	1,717	2,506	2,506
Nova Scotia	9	45	80	569	***	2,952	3,646	8,646
Manitoba	10	45	80	•••	•••	482	607	607
British Columbia	11	•••	•••	225	•••	45	270	270
Prince Edward Island	12	•••	•••	230	45	842	617	617
Total		1,944	1,440	2,148	179	30,579	36,290	36,290
Schools	•••	43		824	64	815	•••	746
Total, 31st Dec., 1884		1,937	1,440	2,472	243	30,894		87,036

In addition to the above there is a small permanent force of two batteries of garrison artillery numbering 324 non-commissioned officers and gunners, one battery (A) being quartered in Quebec and the other (B) at Kingston.

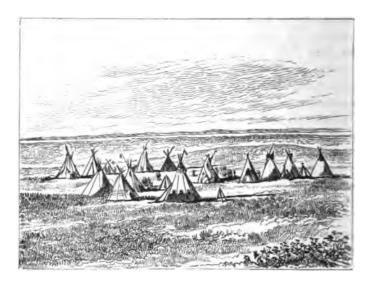
A third battery is in the process of formation at Victoria, British Columbia.

The Minister of Militia and Defence, who is a member of the Government and occupies much the same position as our Secretary of State for War, is responsible for the administration of all military affairs. The Head-Quarters Staff consists of the officer commanding the force, with pay at the rate of \$4,000 per annum, an Adjutant-General, and a Quarter-Master-General with \$2,600 a year each, including all allowances. The twelve military districts, are each commanded by a Deputy Adjutant-General with \$1,200 a year pay. These are five years appointments and cannot be held over the age of sixty-three.

All the male inhabitants of Canada between the ages of eighteen and sixty, unless those exempted or disqualified, are enrolled in the following manner: Each of the twelve military districts is sub-divided into Regimental Divisions, which are again divided into Company Divisions. The captain of each Company Division is bound to make inquiry at every house in his district and to ascertain the names of the residents liable to serve and to divide them according to the following classification:—

- I. All males between 18 and 30 years, unmarried, or widowers without children.
- II. Those aged 30 years, and under 45, unmarried, or widowers with children.
- III. Those between 18 and 45 years, married, or widowers with children.
  - IV. Those aged 45 years and under 60.

The exemptions are: All half-pay and retired officers of Her Majesty's Service, sea-faring men and sailors actually employed; pilots and apprentice pilots; masters of public and common schools; members of the Society of Quakers; Mennonites and Tunkers; only sons of widows.



BIG BRAR'S ENCAMPMENT, BATTLEFORD.

This enrolment by the captains of Regimental Divisions is held to be an embodiment, and renders those whose names have been enrolled liable to serve for three years whenever called upon. Should there not be a sufficient number of males in Class I. to make up the required strength of the regiment those required to complete the quota are to be balloted for from Class II., and so on through Classes III. and IV. until the regiment is made up to its full strength. Any vacancies that occur either by death or removal in any regiment may also be filled up by ballot. These regulations keep the force numerically in a satisfactory state, but the provisions made for training the different corps are not at all calculated to insure proficiency in drill or accuracy in shooting,

In accordance with the provisions of the Militia Act the town corps may be called out for an annual period of sixteen days' training. The rural corps are only called out for sixteen days every second year, but even this short

period of training has been reduced to twelve days. If we deduct from these twelve days the day of joining, and the day of leaving, and two Sundays, there is left, for recruit drill, company and battalion drill and musketry instruction

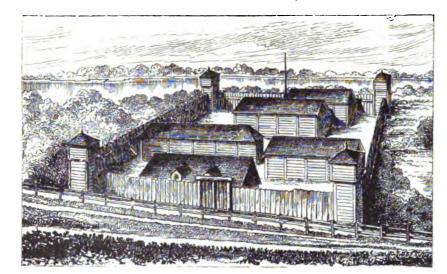
only eight days every year for each member of a town corps, and for each member of a rural corps, at the most, two periods of eight days each during his three years' service, but supposing he is called immediately up after a training he then will have practically but eight days' drill during the whole term of his three years.

The infantry militia are armed with the Snider Entield rifle, and the men are as

FORT PITT, HUDSON BAY COMPANY.

badly clothed as they are armed. I had an opportunity of closely inspecting the "Ottawa Guards," supposed to be a crack corps. Their tunics and bearskins bore a resem-

blance - longo intervallo-to those of our Foot-Guards. The men were badly set up and unsoldierlike in ap pearance; but when I heard from a senior officer of the corps of the difficulties they had to contend with, the want of sympathy on the part of the authorities, the insufficientallowance for clothing, and the constant changes amongst the men, I felt that the commanding officer de-



FORT CARLTON, EVACUATED AND BURNED.

served great credit for sticking to his post at all, and for turning out even as decent a parade as the one I saw.

It should be a strict rule that, except to retired officers of Her Majesty's army, no commission in the Canadian

Militia be granted to any candidate who has not received a diploma from the Royal Military College at Kingston, which has been established for the purpose of imparting a complete education in all branches of military tactics,

> fortification, gineering, and general scientific knowledge in subjects connected with, and necessary to, the military profession, and for qualifying officers to command, and for staff appointments. In addition, the course of instruction is such as to afford a thoroughly practical training in all departments essential to a high and general modern education.

The civil engineering course is

complete in all branches. The obligatory course of surveying is such as is required for the profession of Dominion Land Surveyor; the voluntary course that which is re-

quired for the Dominion Topographical Survey.

Every cadet on entering is duly enlisted, and is subject, for the period of his pupilage, to the Queen's regulations.

The period of service is four years, the course of instruction being four annual terms.

Cadets who, at the end of four years, qualify in the full obligatory course are entitled

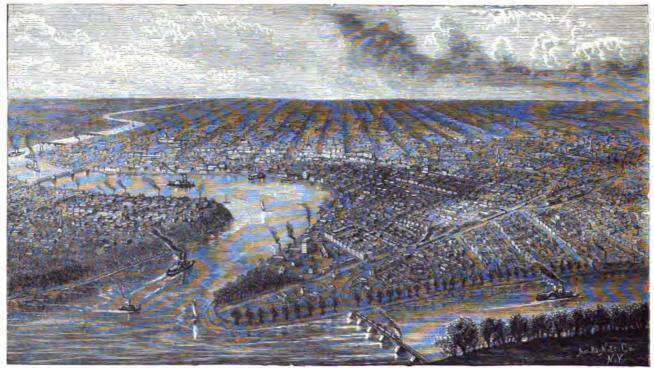
to receive either a "Diploma" or "Diploma with honours."

Four commissions in Her Majesty's regular army, viz.

—one in the Royal Engineers, one in the Royal Artillery,



Indian Chief "Pasqua" (CREE TRIBE).



Winnipeg in 1885, formerly Fort Garry.

one in the Cavalry, and one in the Infantry—are given annually to cadets who have graduated.

There are also five Schools of Instruction, viz., two artillery schools, established some time and in good working order; one cavalry school; and three infantry schools—at Fredericton, N. B., St. John's, Quebec, and Toronto—were formed in January, 1884, and General Middleton reports most favourably of the work that has been done.

If the present—or, as I think I am happily justified in now saying, the late—half-breed and Indian rising has brought prominently forward not merely their merits—which have been great—but the defects, in the organisation and equipment of the local forces of the Dominion, it will prove of immense service, and will soon bear good fruit in the increased security to settlers and the consequent addition to their numbers. It will show how much may be accom-

plished by a force of loyal citizen-soldiers, who, being accustomed to "rough it," added endurance to pluck and courage even if they were not highly disciplined.

Let no false economy or official indifference be now permitted to stand in the way of the Canadian Militia being placed on a proper footing, efficiently armed and well clothed. The training should be, for both town and rural corps, the full sixteen days every year, and there should be a greater number of camps or Depôts where those trainings could be held. A Depôt, with an efficient permanent staff, should be established at each of the principal stations on the Canadian Pacific Railway—a line, the strategic value of which is paramount—and let intending English emigrants feel that ample measures have been taken to secure peace to the North-West Territories for the future.

W. HENRY COOPER, Clk.



A NOTIFICATION has been received by me from Paris, respecting the formation of a French Rifle Association. The preliminary efforts to establish an association in France ought to be made known to our Army, Navy and Volunteers. A reproduction of the notification is therefore now inserted.

EDITOR.

SOCIÉTÉS DE TIR DE LA RÉGION DE PARIS.

# NOTIFICATION

DE

L'ÉLECTION D'UN COMITÉ D'INITIATIVE Chargé des démarches préliminaires

POUR L'ORGANISATION DU

PREMIER TIR FEDERAL FRANCAIS.

A M. le Rédacteur en Chef de The Illustrated Naval and Military Magazine, à Londres.

Nous avons l'honneur de vous adresser un extrait du procès-verbal de l'Assemblée d'Initiative, tenue le 25 avril 1885, à la mairie de l'Hôtel-de-Ville (IV arrondissement), sous la présidence de MM. Oulmann et Simien.

Registre des procès-verbaux n° 1, f° 14.

L'Assemblée:

1. Adopte en principe le projet du premier Tir fédéral français, tel qu'il résulte des documents officiels du Conseil Municipal de Paris, dont il a été donné lecture. (Rapport, brochure n° 130, Bulletin municipal officiel, 16 janvier et 27 avril 1884, dossier transmis à l'Administration.)

- 2. Exprime sa gratitude aux Pouvoirs publics, au Conseil Général, au Conseil Municipal et à la Presse, qui cherchent à favoriser le développement en France de l'institution libre du Tir.
- 3. Pour éviter toute confusion à l'avenir, sauvegarder tous les droits et tous les intérêts, l'Assemblée a l'honneur d'informer les Pouvoirs publics et la Presse, que MM. Vaudet, Simien, Marot, Gervaise, Chapron et Bourdon, sont seuls investis d'un mandat régulier pour se présenter à eux comme Comité d'initiative, et faire les démarches préliminaires pour la mise à exécution des décisions qui précèdent.
- 4. Les travaux de ce Comité seront soumis à la sanction d'une Assemblée générale des Sociétés de Tir de France, qui ont, seules, le droit de nommer un Comité d'organisation définitif.

Dans sa première réunion hebdomadaire, tenue à la mairie de l'Hôtel-de-Ville le 6 mai, le *Comité d'Initiative* s'est ainsi constitué:

Président: M. Vaudet, publiciste.

Trésorier: M. Simien, négociant, président de la Société de Tir "les Volontaires du XVIII arrondissement."

Secrétaire: Léon Marot, avocat à la Cour d'appel, président de la Société de Tir "l'Etude."

Pour copie conforme:

Le Secrétaire,

LÉON MAROT, 31, rue des Dames.

Paris, le 7 mai 1885.

Nota. —Le Comité justifiera de sa qualité par la présentation du registre des procès-verbaux, régulièrement ouvert lors de l'Assemblée préparatoire du 22 février 1885.

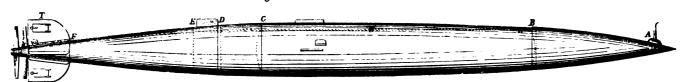
# THE GERMAN VIEW OF TORPEDO WARFARE.

(Compiled from authentic German sources.)

Fig. 1 14 INCH FIUNE MARK II



Fug. 2 14 INCH R.L. MARK II





effected alike in torpedoes and torpedo-boats, the heavy armour-clad vessel seems still to be first favourite with most maritime powers. England, France and Italy are running a close race in the construction of vessels

colossal in size and expense. Austria, Sweden and Denmark have followed their example so far as financial considerations will permit; Turkey and Portugal lack the means rather than the inclination to take the same course; Holland deems herself sufficiently secure in her existing fleet, and does not seem to recognise any immediate necessity for strengthening or improving it. Of considerable naval powers, Germany alone holds aloof from this international ironclad competition, and the following sketch may be taken to embody the principal grounds of her decision.

Although the construction of ironclads is pushed on with unabated activity by the French Government, there appears to be a growing distrust of this class of vessel in the country at large, and among naval officers in particular, which may lead to a similar determination. The startling achievements of the French torpedo-boats Nos. 63 and 64, distinctly point to the advisability of discontinuing the construction of monster ironclads. The enemies of the latter have gone so far as to suggest that the two vessels now on the stocks—the *Brennus* and *Charles Martel*—should be converted into transports.

The ironclad is, however, scarcely likely to be shunted so quickly and ignominously, though considering the late achievements of the torpedo, the relative value of the two antagonistic systems should be carefully investigated. Both are very much on an equality as regards practical illustration, and if the following forecast of the use of the torpedo in the next naval war be condemned as theoretical, the same objection may be advanced with equal force against any defence of the ironclad on practical grounds.

Owing to the uncertainty attending the practical application of other systems for which many advantages have of late been claimed, we will confine our observations in the present sketch to the Whitehead or fish-torpedo, the improvements in which have been of the most startling character. The use of dynamite and gun-cotton has, to begin with, enormously increased its explosive power. Its speed has now reached twenty-five miles an hour, and the distance at which success is almost certain has gradually risen from 200m. to 500 m. At 300m. failure is now almost impossible, at 500m. the deviation of the torpedo varies from 6m. to 8m. Its motive power is now sufficient for a journey of four knots, or double the original distance. Whereas the failure of the machinery was once the rule, it is now a rare exception; and the use of a specially prepared bronze, a secret of the German firm Schwartzkopf of Berlin, obviates the many disadvantages attending the use of steel in water. Lastly with all these improvements, the price of a torpedo has fallen from 375l. to 300l.

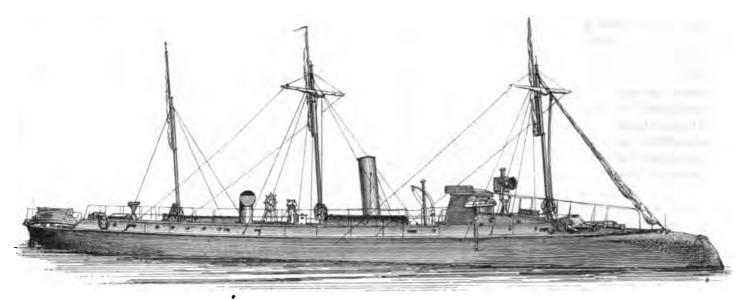
Notwithstanding these strides in the art of torpedo construction, the improvements in the torpedo-boat and torpedo-launch have been yet more striking if not more important.

When the fish-torpedo was first publicly tried in 1867 its operation was exceedingly uncertain and unsatisfactory, and the spar-torpedo was still considered to be the more useful and trustworthy. The latter, however, could only

be employed by means of boats or launches, which at that time scarcely attained a speed of more than seven or eight knots. The success of Thornycroft in 1871 forms an important era in the history of the torpedo as a practical implement of naval warfare. His little cockleshell of three and a half tons launched in that year attained the then phenomenal speed of fifteen knots. He arrived at this result at once by the exceptional build of the boat, the depth of the screw, and the light weight of an exceptionally powerful engine. Thornycroft soon became celebrated for his rapid torpedo launches. Orders poured in from every quarter of the globe, and at the present day there is scarcely a naval power that does not possess a boat of his construction. The speed of his vessels has of course been considerably increased since his first boat was launched.

The dangers attending the use of the spar torpedo were materially lessened by the construction of these vessels, ironclad to be rammed by her opponent. Secondly, the torpedo-launch occupied far too much space on the very limited deck of the present armour-clad vessel. Lastly, the torpedo boat once launched must be left to its own resources. If the enemy be victorious, its position would be the reverse of pleasant.

The existence of Thornycroft's boats, therefore, would not seriously endanger the position of the ironclad. But we must now reckon with sea-going torpedo-boats of great speed and maceuvering power. The first of this type was the *Batoum*, built by Yarrow in the year 1880 for the Russian Government. This boat attained the then extraordinary speed of 22·16 knots, with 500 horse power, and 48 tons. Its journey from England to the Black Sea at an average speed of 11·1 knots sufficiently demonstrated its sea-going qualities. The most important defects of this vessel were, firstly, the small coal supply, which only



GERMAN 18T CLASS TORPEDO BOAT. 'THORNYCROFT'S.
Length, 117 feet 8 inches; beam, 12 feet 6 inches; draught, 6 feet 4 inches; speed, 20 knots.

but they were nevertheless considerable. The attacking party had necessarily to approach very close to the iron-clad, and were consequently exposed for an undue time to the fire of her machine guns. The Russians had bitter experience of these disadvantages in their last war.

Since that time the Whitehead torpedo has been so much improved that it has superseded all older methods of construction. What the result of the latest inventions of Williams and other torpedo constructors may be cannot as yet be definitely judged.

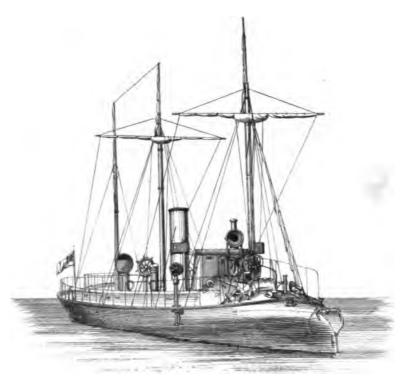
The torpedo-boat was soon employed for launching fishtorpedoes, but its small size and limited coal supply confined its actual use to very narrow bounds. It was adapted solely for coast defence or for transport on the larger ironclads. Its application to the latter purpose was open to several serious objections. The first and most important was the fact that its use in action exposed the

sufficed for 350 knots, when overloaded for 500 knots. rendering constant replenishment necessary; secondly a decrease of speed, when fully equipped for a voyage, to 15.26 knots. The improvements in the torpedo and torpedo-launch have been if possible surpassed by those effected in the torpedo-boat. Some of them crossed the Atlantic Ocean from England to Brazil without assistance of any kind, and although the voyage was made chiefly under sail, the fact that they could be trusted to take care of themselves on the high seas was sufficiently apparent. The maximum speed of these vessels was 20.1 knots. The fastest boat now existing, the Aquila, built by Yarrow and Co. in 1882 for the Italian Government, has a maximum speed of 22.46 knots, a horsepower of 500, with a displacement of 35 tons.

Yarrow seems to have run a close race with Thornycroft in the construction of the torpedo-boat proper. He received orders from almost every maritime state, although rivals sprung up all over Europe; Schichau, "Vulcan" and the Weser Company in Germany, Armand and Normand in France. The last firm were the builders of the famous French torpedo-boats Nos. 63 and 64, the achievements of which, during the late French manœuvres, attracted so much attention. As they were but the successors of the Batoum (Russia), Py (Argentine Republic) and Santa Cruz (Brazil), they can scarcely be said to have been, as the French seem to claim, the first sea-going torpedo-boats. They were, however, the first to demonstrate that these nutshells are fully as safe in the most violent storms as the heaviest ironclads. From their conduct in the late manœuvres, the conclusion must inevitably be drawn that it would be possible to send

a flotilla of sea-going torpedo-boats, unsupported by ironclads, against the enemy's fleet. Should this be practicable, the further construction of ironclads would be a ridiculous anomaly. In considering the utility of torpedo-boats, it may be instructive to review the behaviour of these two typical vessels.

They are 33m. long, 3.28m. broad, draw 86 cm. of water, with forty-six tons and a crew of thirteen men. With a horsepower of 460, their speed ranges from 20.25 to 20.51 knots. They originally carried six torpedoes, now reduced to four. After their successful voyage from



GERMAN 1ST CLASS TORPEDO BOAT (THORNYCROFT'S). FORESHORTENED VIEW.

Havre to Toulon they were attached to the manœuvring squadron on the suggestion of Rear-Admiral Aube—in whom France believes to have found a future Nelson. Between Toulon and Villefranche the fleet was overtaken by a violent storm, against which the ironclads were almost helpless. The Vengeur, a heavy ironclad intended for coast defence, sought shelter with the despatch boat Renard behind the islands of Hyères. Soon afterwards the Tonnerre was forced to separate from the rest of the fleet, which now consisted of four armoured vessels of the first class, the Trident, Colbert, Suffren, and the colossal Amiral Duperré, of 10,686 tons. The decks of these vessels were repeatedly swept by the heavy seas, and their speed was reduced from fourteen to seven knots. In the meantime the two torpedo-boats seemed scarcely affected by the storm. They

broke or rather danced through the waves at a speed of from fourteen to sixteen knots, and although their crews were only saved from a thorough drenching by their waterproof clothes, the boats themselves never seemed to be in the slightest danger. They arrived at Villefranche long before the labouring ironclads.

In consequence of such satisfactory behaviour they accompanied the squadron in all its operations on the Italian, Spanish, and African coasts, and their subsequent conduct did not belie their early exploits. These boats are provisioned for eight days, with a coal supply sufficient for an unbroken journey of 1,000 knots. Without forcing the engines, a speed of eighteen knots can be sustained. For crossing the ocean the supply of coal is of course

quite inadequate; but by the help of a swift coaling-ship this would be comparatively easy. Such trans-oceanic applications, however, come scarcely as yet within the pale of practical consideration. But the employment of sea-going torpedo-boats in the Mediterranean. the Baltic, the North Sea. and the European or the Atlantic Ocean waters seems eminently practicable. These vessels should be able to hunt up the enemy's ironclads in their own waters as well as on the high seas. It is scarcely necessary to say that in the last considerable naval

war (1877) such a consummation was not even dreamed of.

Furthermore, the torpedo-exercises of the two boats were of the most satisfactory character. With the boat steaming at twelve knots, every torpedo struck the mark at a distance of 500 m. With a speed of eighteen knots the deviation for the same distance was only from 6 m. to 8 m. When it is remembered that a large ironclad is seldom less than 100 m. long and 20 m. broad, and that the smallest is about 60 m. long and 14 m. broad, a miss must seem almost impossible.

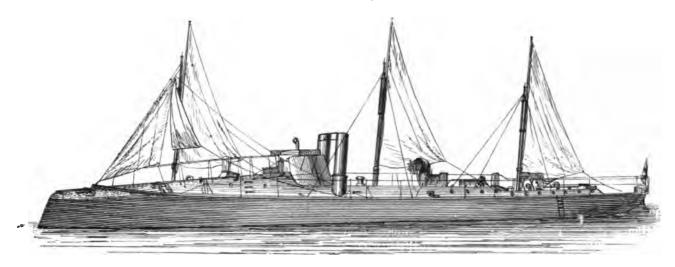
Bearing these results in mind, we may now consider the chances of the sea-going torpedo-boat in the next naval war. One of the most important points is naturally the economical advantage or drawback of this class of vessel.

A sea-going torpedo-boat of sixty five tons, armed with two machine guns, a speed of twenty-one knots, accommodation for fifteen men and a coal supply sufficient for 3,000 miles at a minimum speed of ten or eleven knots, costs but 10,000l. An ironclad of the *Italia* type costs 1,000,000l. Such a vessel, therefore, costs as much as one hundred sea-going torpedo-boats, or two hundred torpedo-boats for coast defence. Let us now consider the relative maritime strength to be obtained for the same monetary outlay.

One power (A), possesses, let us suppose, the four ironclads *Italia*, *Lepanto*, *Duilio*, and *Dandolo*, which cost in all 3,600,000l. Another power (B) has procured for exactly the same sum a fleet of 360 sea-going torpedo-boats. The former, believing herself supreme at sea, despatches her fleet to hunt up the enemy. Now it is clear that the ironclads, with a speed of from fifteen to eighteen knots, cannot force a combat with a torpedo-flotilla that can

guns about thrice. Can it now be contended that one discharge of the heavy, two of the light, and three of the machine guns would suffice to sink a torpedo flotilla of 360 boats? It is, furthermore, in the last degree unlikely that any but the first discharge would be at all effective, for the ironclads would be so enveloped in smoke that their aim must become in the last degree wild and uncertain. The experiences of Alexandria and Futschu should sufficiently support this conjecture. What damage, then, could one discharge do against a small and almost invisible enemy advancing at the speed of from twenty to twenty-two knots? It might destroy twenty, fifty, or even, let us say, 100 torpedo boats.

In the latter case there would still remain 260 torpedo boats, and A would be blown to pieces. His loss would amount to 3,600,000*l*. and 2,500 men, and the dominion of the seas. B would lose 1,000,000*l*. and 1,500 men, and for this price would have gained the naval supremacy which



RUSSIAN 18T CLASS TORPEDO BOAT, "SOURHOUM." THORNYCROFT'S. Length, 113 feet; beam, 12 feet 6 inches; draught, 6 feet; speed, 20 knots.

steam from twenty to twenty-two knots. The latter, then, must always have the advantage of attack, and it should furthermore be remembered that owing to its small draught the torpedo flotilla can navigate the shallowest waters, while the ironclads cannot venture without an assured depth of 10 m.

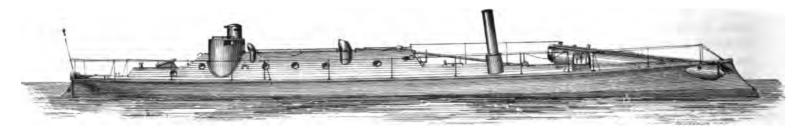
B, let us suppose, decides to attack his enemy. Despising the protection of night or fog, he does this in broad daylight. The fleet cannot escape, and are therefore forced to await the combat as best they can. The four ironclads have between them, say sixteen 100-ton guns, twenty-two 15-cm. guns, twenty-four 7½-cm. guns, and fifty machine guns, in all 112 guns of various calibre. As may be seen later on, the thirty-eight heavy guns could only be fired once before the approach of the flotilla to within 500 m., at which distance their torpedoes can be launched with almost absolute certainty of success. The lighter guns could probably be fired twice, the machine

the other had lost. It is more probable that B's loss would scarcely exceed thirty boats—300,000l. and 450 men

B's loss would be still smaller if—as would of course be actually the case—the attack were made not by 360, but by forty boats, at certain intervals from one another. In this case scarcely more than a fourth could be put hors de combat, and the loss would amount to 100,000l. and 150 men, as against A's loss of 3,600,000l. and 2,500 men. B's comparatively insignificant loss could be yet further diminished if fog or night were chosen for the moment of attack. In spite of the electric light, the torpedo boats could then approach to within 500 m. without risk of detection. The manœuvres of Spezia afford a good example of the chances of this mode of attack. In the daytime the torpedo-boats, under cover of the smoke of the ironclads, approached to within 200 m. and at night, in spite of the fact that their attack was awaited at a given time, notwithstanding

the electric light and the closest vigilance, they advanced to within but 50 m. of the ironclads before they were discovered. What the consequence would be in actual war can better be imagined than described. In the Spezia manœuvres, it must be remembered, the crews of the ironclads were not worn out, morally and physically, by weeks or months of ceaseless vigilance. In the next naval war the torpedo-flotilla could afford to wait until the defenders of the ironclad had exhausted their patience and

after chasing the Chinese ironclads Jujuen and Tscheu-kiang until they sought safety in shallow water, sent the two torpedo launches of his flagship Bayard, nutshells of but four tons, against them. Both ships were destroyed, with their crews of 900 men. On the French side no casualties of any kind were reported. In this case it should be remembered that the attack was made in broad daylight, and that the Chinese vessels had between them thirty-six heavy and several light guns.



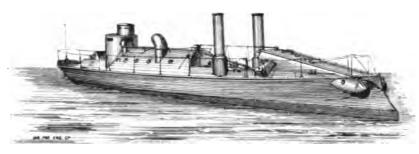
ITALIAN 2ND CLASS TORPEDO BOAT. THORNYCROFT'S. Length, 66 feet; beam, 8 feet; speed, 18 knots.

alertness in a vain watch for an enemy that came not. The attack would then be made. A black shadow would glide swiftly from the inky darkness without the belt of electrically lighted ocean, and in a few seconds the work of destruction would be complete.

With the torpedo-boat the case is far otherwise. Its crew are subject to no nervous tension, as they are well aware that the choice of attack must lie with them. They know that, whereas they are protected by the night, the electric light of the enemy only serves as a guide to direct their attack. They know, too, that even when within that zone of brilliant light they have practically little to fear.

They have only to fear one hurried and highly uncertain discharge, and even if the torpedo be launched at a distance of 500 m., a deviation of from 80 to 100 m. can scarcely be expected.

The uses of the torpedo-boat have re-



ITALIAN 2ND CLASS TORPEDO BOAT. THORNYCROFT'S FORESHORVENED VIEW.

ceived practical illustration in the Franco-Chinese war. At the commencement of the bombardment at Futschu the French torpedo-boats, Nos. 45 and 46, attacked two Chinese corvettes, and were received by a discharge of machine guns and small arms. The two boats were nevertheless uninjured, while the casualties among the crews were confined to two men only. On the other hand, the two Chinese vessels, one of which carried the admiral's flag, were within a few minutes blown up with their crew of 500 men.

A second example occurred but lately. Admiral Courbet,

From the foregoing it should be sufficiently clear that any ironclad squadron is lost which is attacked in the daytime by a torpedo flotilla of six boats to one ironclad, or at night by half that proportion.

It may be urged that in future every ironclad fleet will be accompanied by a torpedo flotilla which will form, as it were, a first line of defence. Let us suppose this to be the case. In this event B would choose the night time for his attack. A, let us say, is at anchor, protected by a cordon of torpedo-boats. B would advance with the noiselessness peculiar to the torpedo-boat, and his presence would not be discovered by A until he was close upon

him. The opening shots exchanged between the rival flotillas would be the first note of warning to the ironclad fleet. A scene of wild confusion would probably ensue. The electric light of the ships would instantaneously illuminate

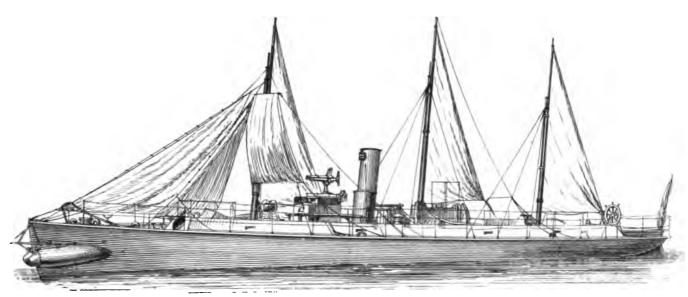
the sea for hundreds of yards around, but considering that all torpedo-boats are very much alike, and that the fight between the two flotillas would be a close one, the ironclads could not use their machine guns without imminent risk of sinking their own boats. The attacking force would be more or less concentrated on one point, the defenders would be ranged at intervals around the fleet. The line of defence must inevitably be broken at the point of attack, and in this case the fleet would be lost. It might be urged that the squadron could then

employ their machine guns; but it must be remembered that the defending torpedo-boats would instinctively follow the attacking force. Both before and after the attack, therefore, the machine guns would be practically useless to the fleet. After the destruction of the ironclads, the fight would resolve itself into a struggle between the rival torpedo flotillas. Even should the ironclad torpedo-boats prove victorious, such a victory would not compensate for the loss of the squadron which they were intended to protect. A would have lost a fleet requiring years to build, B a flotilla which could be replaced in a few months. It is highly probable that B would not lose his flotilla. If he were numerically weaker than the defending force, he would slip away in the darkness and confusion after the destruction of the fleet.

The electric light for which so much is claimed will scarcely answer expectation. Firstly, it shows the way to

and so far as we know, they have invariably resulted in a victory for the torpedo-boats when undertaken under conditions resembling those of real war. Many have contended that torpedoes could only be employed with success on a calm sea. That was no doubt originally the case, but it is no longer so. The latest experiment in France and England have established the fact that the chances of success are but little diminished by a heavy sea at the time of launching. On the other hand, the destructive action of the machine guns of the fleet would be reduced, under such conditions, to a minimum.

The torpedo-boat has another advantage over the ironclad, more important than would at first sight appear. The latter are commanded by men somewhat advanced in years, in whom the fire and energy of youth have long given place to the cool judgment of later life. The enormous responsibility on their shoulders, the fact



Danish 1st Class Torpedo Boat. Thornycroft's. Length, 114 feet; beam, 12 feet 6 inches; speed, 19½ knots.

the enemy's torpedo-boats; secondly, it renders the unlit portion of the ocean blacker and more impenetrable. With the enormous range of the latest torpedoes, a flotilla could approach to the edge of the illuminated circle, and there, completely unseen, discharge their missiles of destruction.

We do not here intend to investigate the various methods proposed for attacking an ironclad fleet. One example may suffice. Lieutenant Adams of the *Minotaur*, was entrusted with the command of a torpedo flotilla commissioned to attack a number of ironclads. He divided his force into two divisions. While the one made a slight attack on the ironclads the other made a slight divergence to take them in flank. By the aid of the electric light the first division was discovered and received with a hail of bullets from the machine guns of the fleet. The other approached unseen to within 100 yards. In actual warfare the ironclads would have been irretrievably lost.

Similar manœuvres have been carried out in all navies,

that the slightest error in calculation may send a colossal ironclad with its crew of hundreds to destruction, must exercise an influence upon them which is hardly likely to err on the side of enterprise or initiative. The torpedoboats, on the other hand, are commanded by young officers burning to distinguish themselves by some glorious exploit, and their dashing courage must triumph in the long run over the hesitating caution of the ironclad commander. The actions of the Russians in 1877, and of the French in Tonkin, have afforded numerous examples of the reckless enterprise which we may expect to find among the young commanders of torpedo-boats and launches.

Among the means of defence put forward by the upholders of the ironclad system, wire-netting figures as perhaps the most important. Though its use by the Turks at Sulina in 1877 was attended with satisfactory results, it should not be concluded that the "crinoline" is as trustworthy as seems generally to be thought. At

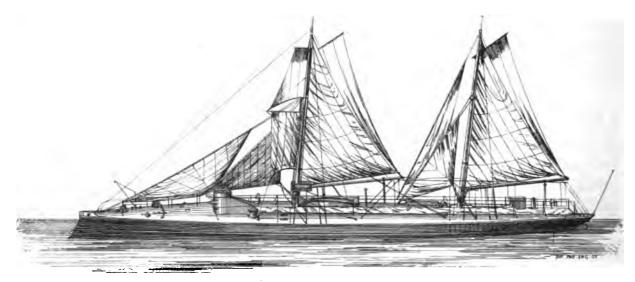
Sulina the torpedo struck against the netting and exploded; but that torpedo was not a fish torpedo. Had the Russians possessed the latter missile, it would have been easy to have sent a second through the rent made by the first. The use of the "crinoline" is, furthermore, attended by many serious drawbacks. It renders the ironclad, whether at anchor or not, doubly liable to be rammed by the enemy; it reduces the effective speed by five or six knots, and renders manœuvring practically impossible. The netting, then, would not protect an ironclad from a number of torpedoes launched one after the other. It would deprive its wearer of the chance of ramming, and increase fourfold its liability to be rammed.

From the foregoing arguments we must draw the conclusion that an ironclad fleet would be helpless against a torpedo flotilla, even on the high seas.

It may be urged that navies cannot consist exclusively of torpedo-boat flotillas. Who or what, it may be asked,

although the full moon shining at the time rendered the night almost as light as day. The torpedo-boats were approaching at a speed of twenty knots an hour. Within half a minute, therefore, they would have reached a launching distance of 500 m. from the ironclad squadron. It can scarcely be contended that within that time the alarmed and excited crews of the fleet would be enabled to take anything like careful aim at the gliding shadows approaching at so great a speed with all the advantages of deceptive moonlight in their favour.

If at the fall of night the squadron should retire to the high seas, the blockade would not only be raised, but the safety of the fleet would not be insured. Themselves unseen, the enemy's torpedo-boats would follow the retiring squadron, and await at a distance a favourable opportunity for attack. That they could do so, experiment has sufficiently proved. Torpedo-boats, it has been found, are invisible in broad daylight at a distance of 4,000 or 5,000 m.,



ARGENTINE GOVERNMENT TORPEDO BOAT, THE "ALERT." YARROW. Length, 100 feet; beam, 12 feet 6 inches; speed, 20 knots.

is to defend or attack coasts and harbours and destroy an enemy's commerce?

It seems highly likely that, in coast defence, the torpedoboat will play an important part. A blockade in the face of an enemy possessing a strong torpedo flotilla would be almost impossible. Such a blockade would be extremely dangerous in clear daylight; in fog or darkness it would be absurd. The defenders would need simply to send out their torpedo-boats after nightfall, and the blockading fleet would be lost. In this connection, the experiments of the French manœuvring squadron off Algiers are highly instructive. Admiral Jaurés wished to ascertain the chances of a torpedo attack on a moonlight night. The squadron were advised that the attack would be made between nine and ten o'clock. At that time, fully prepared for the event, they were steaming at a rate of nine or ten knots. In spite of their utmost vigilance, the two torpedo-boats, Nos. 63 and 64, approached unobserved to within 100 m., while their crews can still keep the ironclads in sight. It would be possible, indeed, for a flotilla to follow an ironclad squadron by day and attack it by night.

The bombardment of a harbour defended by torpedoboats would be equally dangerous, if not indeed, impossible.

After the first few discharges, the ironclads would be so enveloped in smoke that the approach of the torpedoboats could not be discerned.

We have endeavoured to show in the foregoing that torpedo-boats are available alike for defending coasts and harbours, and attacking, but not for protecting, ironclads. Will they be available for cruising purposes?

Sea-going torpedo-boats, to begin with, are scarcely likely to be used for the destruction of an enemy's commerce; at least we hope not, for the credit of the human race. It would naturally be within the power of a torpedo-boat steaming from twenty to twenty-two knots to overtake and

destroy a merchantman that could not cover more than eighteen. The exigences of war are made to justify many otherwise indefensible atrocities; but the cold-blooded destruction of hundreds of non-combatants which such an application of the torpedo would imply could not be defended on any grounds whatever. It might be contended that the merchant steamer would be forced to surrender to save itself from destruction. But the limited complement of the torpedo-boat, which would scarcely exceed fifteen men, would preclude them from putting a prize crew on board. There would then be but two alternatives. Either the immense merchant steamer with its freight of hundreds of human lives would be utterly destroyed—or it would be left untouched.

For the honour of the sailors of all nations we may

assume that the latter alternative would be accepted. In this case, the inutility of the sea-going torpedo-boat as a means of destroying, or rather capturing an enemy's mercantile navy, would be clear enough. Special cruisers would be needed for this service. Such cruisers would not be liable to the attack of torpedo flotillas to any great extent. They would, firstly, be exceedingly fast; and secondly, their supply of fuel would soon bring them without the range of the torpedo-boat, the best of which can only cover 3,000 miles at eleven knots. Large cruisers would, however, be supplied after a time with transportable

torpedo-boats, which they could carry to the Antipodes, and there use as a species of despatch boat, while at the same time they would be extremely useful in action. There seems no reason why fast cruisers should not take their torpedo-boats in tow. If a suspicious vessel should heave in sight, the torpedo-boat would retire behind its larger companion. In the event of a combat, it could slip out under cover of the smoke, and blow the hostile craft to pieces. Should these conjectures prove correct, torpedoboats will be available to support the operations of fast cruisers.

The use of water-tight compartments may be advanced in favour of the ironclad system; but several ships built on this plan have already been sunk. The best and most effectual manner of settling this question would be to send a few torpedoes against a ship provided with these compartments. The experience gained would, in any case, far outweigh the monetary cost of the experiment. It would, at any rate, serve to decide the respective merits of the two systems.

For the sake of an example, let us suppose an outbreak of hostilities between England and Germany. However unlikely such an occurrence, it would yet afford a striking illustration of the force of our contention. England would send, say, thirty-five heavy ironclads to Heligoland, and the German ironclad fleet, unable to meet such a force, would retire to the protection of the harbours. The German torpedo flotilla would then be despatched to engage the English squadron. At the outbreak of war, Germany would possess, let us suppose, the 150 torpedo boats, the construction of which is now part of her naval programme. The English fleet could not be concentrated, its operations must be confined to a desultory blockade of the chief naval ports. Twenty ironclads would probably remain in the North Sea, while fifteen would be despatched

to the Baltic. The English fleet after blockading the harbours by day, would seek protection from German torpedoes by placing a considerable distance between them and the shore by night. They would inevitably be followed by the German torpedo flotilla; and a cordon of 50 or 100 torpedo-boats would, as we have already shown, fail to save them from destruction. The rest of the English navy would soon be destroyed. What could then prevent the German ironclads from escorting a fleet of transports carrying 100,000 Germans

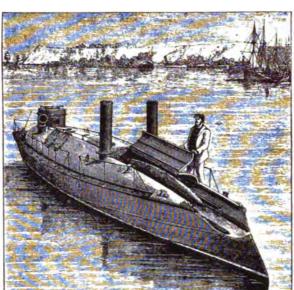
The existence of an ironclad

for the invasion of England? fleet cannot, then, be justified. As a mere escort for a fleet of transports, fast cruisers would amply suffice, especially as torpedo-boats would necessarily accompany the expedition. It seems certain that the next naval war will resolve itself into a huge combat between rival torpedo flotillas; and that the victory will remain with the fastest and most numerous.

Such is German opinion on this much-debated question. As to its correctness we leave our readers to judge.

C. J. L'ESTRANGE.

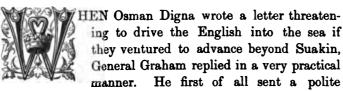
Note.—Since the above was in type, I learn that the Admiralty authorities have determined to make her Majesty's ship Resistance the object of torpedo experiments. This vessel is now at Devonport, and is one of the oldest of existing ironclads. She will be protected by sixteen inches of armour and then towed into position to form a target for one of the latest pattern torpedoes. Although in this case the advantage will be entirely on the side of the torpedo, the experiments should serve to decide many points on which doubt is now becoming dangerous. EDITOR.



YARROW TORPEDO BOAT WITH PATENT IMPULSE GEAR.

# THE BATTLE GROUND AROUND SUAKIN.

(Compiled from Official and other sources.)



acknowledgment to the rebel chief denouncing the barbarous war of extermination, which the Mahdi was carrying on, as contrary to all the teachings of Mohammed; and pointing out that as England herself was a Mohammedan Power, the war which she was then waging was in no way a religious war, but one undertaken to restore peace and order to the Soudan. The letter concluded by recalling to Osman Digna's memory the victories of El Teb and Tamanieb, and threatened him with a more crushing defeat unless he averted the blow by immediate submission.

This was on the 19th of March last, and on the following morning General Graham followed up his letter by an advance from Suakin. This was a practical way of showing earnestness of purpose which an Oriental mind is always capable of understanding. It does not comprehend threatening words unless followed by threatening action. General Graham's first object was to occupy the hills in front of Hasheen, so as to establish a strong position commanding the valley, and protecting his right flank and the line of communication in the operations which he was projecting against Tamai. This was successfully carried out, but not without sharp fighting, the Arabs showing their usual courage and contempt of danger.

The whole force, with the exception of one English regiment (the 53rd), left as camp guards, moved out on the morning of the 20th about 6 A.M., in square formation. The first ridge of hills was reached at 8.30 A.M., the enemy retiring. The 70th regiment was left here and set to work at once to construct four sand-bag redoubts with zerebas on the summits on the left of the line of advance.

The second range of hills was held by the enemy in some force, but was cleared by the Marines in splendid style, the rocks and precipitous slopes being rapidly scaled and the Arabs driven off at the point of the bayonet. The Indian infantry having deployed then advanced upon the

village of Hasheen, supported by the brigade of Guards which, formed in square, covered their rear. The mounted infantry scoured the thick bush on the extreme right, and the artillery from a well chosen position cleared the right flank with shell and shrapnel.

So far matters had gone smoothly with the attacking force, but it was soon evident that Osman Digna's troops did not contemplate submission. Driven from the hills on the left by the advance of the Marines, a large body of them descended into the plain on the other side. A detachment of the Bengal Lancers was sent to intercept them, but instead of flying from the horsemen they turned and boldly charged the cavalry as it advanced. A severe hand to hand fight took place. The Arabs, practising the same tactics as at El Teb, threw themselves upon the ground and hamstrung the horses with their swords. The Lancers had to fall back with loss, retiring on the Guards. Emboldened by this success a party of about 150 strong suddenly debouched from behind a hill within 300 yards of the Guards, and actually charged down upon the brigade; whilst another body some 3,000 strong, who had been lying down in their rear, rose to support this attack. The Guards received the onslaught steadily, pouring such withering volleys into the mass of the assailants that they broke and fled

Whilst this attack was going on another party of the enemy on the extreme right rear of the main force tried to break through in the direction of the redoubts which the 70th were constructing, making way between them and the hillock upon which the General with his staff had taken up their position. This attempt was, however, splendidly foiled by a brilliant charge of the 5th Lancers. 20th Hussars, a troop of the Indian Lancers, and the Mounted Infantry, who swept down upon the Arabs—who again tried their old tactics of hamstringing the horses but this time not successfully—our cavalry almost exterminating the band of dusky warriors with lance and About this time a large body of the enemy, estimated at about 4,000 strong, appeared on the British left rear, having arrived on the scene of action from Tamai. It was now 1 P.M. and the second brigade and



OINT OF OBSERVATION.

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Indian Infantry were ordered to fall back upon the Guards; and at 2 P.M. the whole force began their march back towards the hill occupied by the 70th Regiment. The Indian Contingent formed the advance, followed by the 46th and Marines, while the Guards, still in square, with the Artillery, Ambulance, and Transport in their centre brought up the rear. The situation soon became critical, for the Arabs, now in great numbers, boldly attacked. "The position," wrote the spec al correspondent of the Standard, himself a sharer in, the danger, "was by no means a pleasant one for the enemy swarmed around us, and the square, encumbered with its impedimenta, had to fight its way over ground covered with dense bush, the Arabs closing in on all sides but chiefly on the rear and left flank. For half an hour the Scots Fusiliers and Coldstreams, had to endure a very heavy fire from the almost invisible enemy, halting every 200 yards to fire volleys into the scrub. The Guards were, however, perfectly steady, moving on under the galling fire with admirable coolness, and in three quarters of an hour they emerged from the bushes into a comparatively open country."

At 3 P.M. the first ridge, where the 70th had completed the redoubts and zerebas, was reached. The troops had then been fighting and marching for nine hours under a blazing sun. Leaving the 70th, with two guns and four Gardiners, to hold the redoubts, the force, after a refreshing halt, marched back to Suakin, the enemy not attempting to molest them on their way.

The loss on the British side was one officer, and eleven men killed: three officers, and forty-nine men wounded. The enemy's loss could not be ascertained as they carried away the most of their killed and wounded, but it was thought that it could not have been less than 1,200. The force of the enemy actually engaged or threatening was estimated at about 8,000 men, most of whom had come from Tamai, but too late to form a well concentrated attack.

No. 1 sketch shows the Hasheen Valley as seen from Sir Gerald Graham's first post of observation on the morning of the 20th of March, 1885, and the redoubts built that day.

On the 22nd of March General McNeill, advancing with his brigade from Suakin towards Tamai, was met by the Arabs, who made a very sudden and determined attack upon his force, the majority of whom were at the time engaged in constructing zerebas, unaware that their savage enemy was lurking in considerable strength in their vicinity. The whole affair lasted but a quarter of an hour, but it was a very bad quarter of an hour. The Standard's correspondent, whose graphic descriptions have already been made use of in compiling this paper, divided this quarter of an hour as, five minutes of confused but desperate fighting, of hand to hand struggle and imminent danger; five minutes of a terrible sweeping fire into the masses of the enemy, and five minutes completing their

dispersal after they began to recoil. "For a time nothing could be seen, so dense were the clouds of smoke and sand-dust that covered the scene of conflict. Then when the air cleared it could be seen how great was the destruction which our fire had wrought. Over a thousand Arabs lay dead around our zerebas. Taking the number who must have fallen in the bush or have crawled there to die, there can be no doubt that the loss of the enemy exceeded fifteen hundred, including many of their most valiant chiefs." Our victory, however, was by no means cheaply won. Our total loss in the three zerebas was, of British, seven officers and sixty-three men killed, six officers and eighty-nine men wounded, while the casualties of the Indian Infantry amounted to about eighty. A great many camp followers were killed in the stampede outside the zereba and in the flight to Suakin. The loss in transport animals was immense. "Uninformed" criticism rather attributed blame to the general in command for this extraordinary affair, but General Graham telegraphed to Lord Wolseley "I am of opinion that McNeill did everything possible under the circumstances," and Lord Wolseley telegraphed this satisfactory assurance to the War Office, who gave it to the public.

It was considered necessary, however, by General Graham to make a move against Tamai, the supposed stronghold of Osman Digna, and on Good Friday, the 3rd of April last, this move was made. A force consisting of the Scots Fusilier Guards, the Coldstreams, the 53rd and 70th Regiments, the Royal Marines, the 15th Sikhs, and 28th Bombay Infantry, and last, but not least for honourable mention, the Australian Contingent, left Suakin on the morning of the 2nd of April, accompanied by a great convoy consisting of a thousand camels and fifteen hundred mules, laden for the most part with water. The march commenced at 2 A.M., and the final halt for the day sounded about sunset when the Teselah Hills, a group of crags overlooking the Tamai Valley, had been reached. After the toil of a twenty hours march the Infantry were glad at the prospect of a rest, and a bivouac was formed in a hollow between the hills, the Mounted Infantry pushing on to Tamai. About midnight a dropping fire was opened upon the sleepers which did some execution, and obliged the Grenadiers to send some volleys at the enemy and the Artillery to throw in some shrapnel shells. At sunrise the next morning the columns, numbering some 7,000 bayonets, moved out towards Tamai. This place was reached at 10 A.M. and was found to be abandoned, a discovery which the Mounted Infantry had already made for themselves. Tamai consists of a group of five villages with wells in the centre. The former were deserted by the enemy without firing a shot, and the latter were not only filled up but on being sounded the supply of water was found to be exhausted. There was nothing for it but to march back again to Suakin, and this was done after, however, setting fire to the five villages of Tamai. Large as was the

convoy it had brought out but three days water supply for the whole force, and the failure of the wells at Tamai forced General Graham to abandon his intention of advancing against Tamanieb. Owing to this want of water the whole course of the intended campaign had to be arrested. The result of the expedition was summarised by the correspondent already quoted: "It was a severe disappointment to the troops, that, after their immense exertions, after the efforts of the transport in preparing for the advance, the marches in the blazing sun to and from the zerebas, the heavy loss of life in the previous engagements, to say nothing of the enormous cost, the enemy should refuse to await our attack, and that the want of water should prevent our following him up. The temporary occupation of a wretched village is a poor result to show after such labour, efforts and sufferings."

Sir Gerald Graham, however, was of a different opinion. He telegraphed to the Secretary of State for War from Suakin at 11.50 a.m. on April 4. "Troops began return march from Teselah zereba at 2.15 P.M. yesterday, and arrived at No. 1 zereba at 5.50 P.M. General Freemantle reports everything most satisfactory."

The most satisfactory things perhaps were the excellent work done by the troops, who bore the fatigues of these two days marching, and constructed a zereba on their arrival at Teselah Hill, and the conduct of the Australians who had two men wounded. Of the Colonials the General says: "The Australian Contingent have cheerfully borne their share of our hardships, and showed themselves worthy comrades in arms."

The force, which constituted the expedition to Tamai, represented a total of 8,175 officers and men, and it was reported that only eleven men fell out during the march back to Suakin. The casualties were seventeen wounded and thirty-three sick. With this force were 1,752 camels, 1,040 mules, and 1,773 followers. General Graham gives only the credit that is due to the men for their good work upon this occasion: "The marches though not very long were very trying, owing to the many delays, the deep sand, and hot sun. There is much delay and fatigue in escorting a large convoy of tired thirsty animals, with continual halts to readjust or shift loads. Only very steady, well-disciplined troops could have brought this large convoy in through the bush without loss."

Sketch No. 2 is taken from the highest point of the Teselah hill looking S.W., the position occupied by Sir Gerald Graham on the 2nd of April, 1885. Tamai is shown in the distance.

It was generally thought, and this opinion was telegraphed to the Secretary of War by General Graham himself, that this expedition to Tamai and the destruction of the place after Osman Digna's proclamation to drive the English into the sea, would greatly discourage his followers. To add to this presumed discomfiture it was decided to make another advance into the interior—

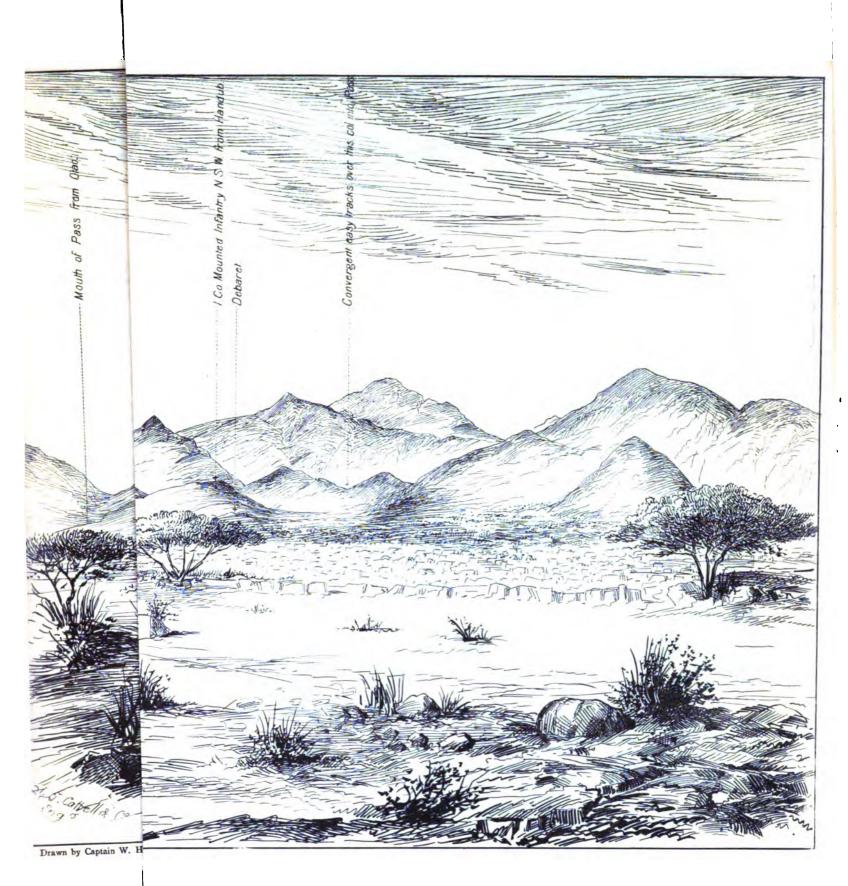
towards Handoub. The intention was to push straight along the Berber Road, building fortified zerebas and blockhouses every five miles, through Wady Otan and Tainbrook on to Es Sibil, about fifty miles from Suakin. This latter place stands upon a very elavated plateau, and it was here that summer quarters for the troops were to be established. From this point Sinkat, in the vicinity of which Osman Digna is supposed to be lurking, could easily be occupied, as the plateau is open and rises gradually from Es Sibil to the hill upon which Sinkat is situated.

On the 18th of April General Graham made another reconnaissance in force, marching from three different points, Suakin, Handoub, and Otao on Hasheen, Deberet, and the Valley of Khor Aberst. Handoub is situated about twelve miles from Suakin across a smooth plain rising slightly from the sea and traversed by beds of numerous torrents which flow from the mountains during the rains. As the surface is stony and the slope gentle, these water-courses are never deep or abrupt. Small acacias, some two to three feet high, are scattered over the plain, but there is no other vegetation. It is usually made the first halting-place for caravans from Suakin. Otao is about five miles further within the Waratab Hills. The under features on either side are from three-quarters to two and a half miles distant, rocky and abrupt, and immediately behind them the view is limited by rugged mountains rising from 1,000 to 1,500 feet above the sealevel. The word Khor, it may be mentioned, signifies a water-course containing water after rain, but usually dry.

The columns during their march met with no opposition although parties of the enemy were seen. After burning the village of Hasheen, which showed signs of being recently occupied, the force returned to their separate camps.

Sir Gerald Graham reported this reconnaissance in very favourable terms as to the conduct of the troops: "The reconnaissance has shown the enemy that we can move through their hill country, and by marching from three different points we covered a considerable extent of country. The half battalion Scots Guards from Otao marched twenty miles over hills without a man falling out. The Australians marched fourteen miles through a difficult pass for nine hours, their commanding officer conducting the retirement in excellent order, only one man falling out. The Sikhs from Suakin marched twenty miles at a swinging pace, only three men falling out Cavalry, Artillery, and Mounted Infantry worked well. The result must be to produce yet greater discouragement amongst Osman Digna's followers."

Whether this has been the result now that political reasons have interfered to stay further military operations, time alone can show. If failure and disappointment follow, the blame will not be with the regimental officers and men who have worked and fought nobly under extraordinary difficulties and against foes of extraordinary



COMBINED RECONNAISSANCE ON THE 18TH OF APRIL, 1885, which they would have descended into the Khor.

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courage and daring. The honour and good name of England has been safe in the keeping of her soldiers in the Soudan.

Sketch No. 3 shows the country in which the combined reconnaissance on Hasheen, Deberet, and the Valley of Khor Aberst, was made on the 18th of April, 1885, from Suakin, Handaoub and Otao.

The sketches, the clever work of Captain W. H. Sawyer, Royal Lancaster Regiment, attached to the Intelligence Department at Suakin, are of considerable value and interest, as showing the military features of the country which has lately been the scene of so much strife and trouble to British arms and diplomacy.

G. ROE FENWICK



# LONGRIDGE'S WIRE ORDNANCE.

THE attention of all our readers who are interested in the best description of ordnance this country ought to possess, is directed to the translation of an excellent lecture read at Coblentz, on the 23rd of January last, at the scientific meeting of the German Artillery Corps, by Captain Callenberg, Chief of Battery, 1st Rhenish Field Artillery, Regiment No. 8. The lecture is published in pamphlet form by Phipps & Connor, Printers, &c., Tothill Street, Westminster. The subject was the Longridge Wire Ordnance. The gallant officer exhaustively dealt with this remarkable system, which, by the way, has been before our own War Office authorities for twenty-five years. Until latterly, when, in fact, the serious attention of the Director of Ordnance Branch is drawn to the fact that Germany is about to take up the system, and that our Parliament would before long, inquire into the reasons why this branch of the War Office has so long put aside Mr. Longridge's plans, this able man and his admirable system of ordnance production have been completely jumped upon. After twenty-five years struggle with the Director of Ordnance Branch of the War Office against every kind of prejudice or ignorance, Mr. Longridge at last came before the British public with his valuable invention, and then left the matter to time and results with better fortune: for the German government, and its scientific officers, attracted to Mr. Longridge's book, and to the soundness of his views and theory, determined to investigate the whole subject. Then, as usual, a rush is made to cover up past War Office neglect and delinquencies, by an effort to keep pace with the German authorities.

Inventor after inventor places the results of his laborious work before our War Office Ordnance branch, to be snubbed and cast aside. If he cannot gain entrance into "the ring" he is doomed to the severest disappointment and ignominy. Outside "the ring" his chances of having his inventions adopted, however good and suitable, are absolutely nil; his mind is wasted on the desert air. This, in fact, is the kind of treatment patriotic British inventors must expect to meet with unless; by some extraordinary influence, they can gain admission into "the ring." Vast and costly to this country are the operations of this dangerous "ring." How the public can stand quietly by and see its money literally pitched into the sea in millions, through

the ignorance and wrong-doings of its officials, is one of the marvels of the times in which we live. But other nations perceive "the ring's" disastrous operations, and draw attention to them too.

It was an unfortunate resolution which Lord Panmure made in 1855 to break up the Board of Ordnance, instead of reconstituting it. The urgency for the re-establishment of this Board is, in these days, but too evident. Disaster and ruin at a great national crisis, and nothing short of it, will awaken the country to the necessity of protecting itself from the operations of the vast "ring" of men whose self-interested actions are fast leading the nation to failure and disgrace at a critical moment.

It must be really admitted that the task of endeavouring seriously to interest people of influence and position into putting an end to the operations of this "ring" is a very heavy one. Still it is worth persevering with, and it must be persevered with on patriotic grounds alone.

German officers appear to be quite cognisant of all the doings of interested officials, and of others connected with them. Here is what Captain Callenberg says to his hearers concerning Mr. Longridge and his neglected system:

"It certainly would appear that an under-current of ill-feeling in the English Ordnance Committee has prevented a special and impartial examination of the question, as Mr. Longridge has, during nearly a quarter of a century, been asking in vain for a trial, at least, of his system. Scarcely was a reply deigned to him, and when one was given at any time, its tone showed that the Committee had never seriously entertained the matter, for their refusal was based on very weak grounds, and, moreover, was couched in uncourteous terms."

Again, at the conclusion of his valuable lecture:

"Let us not, therefore,—like the English Ordnance Committee—rudely repulse the hand which is held out to lead us a step forward on our way, but rather let us make a trial. Should the new system prove to be the better one, there will remain, in the words of Attinghausen, this consolation:—

" 'Das Alte stürzt, es ändert sich die Zeit, Und neues Leben blüht aus den Ruinen."

## MILITARY BIOGRAPHY.

# THE RIGHT HON. THE MARQUIS OF HARTINGTON, M.P.





HE interests of the army are so inseparably intertwined with the actions of those who hold and have held the office of Her Majesty's Secretary of State for War that our portrait gallery of military celebrities would be incomplete

without an illustrated notice of the distinguished nobleman now filling this important appointment. Lord Hartington indeed possesses a double title to publicity in our columns, for if it be objected that the post of War Secretary is purely a civil appointment, Lord Hartington's name figures in the Army List as Hon. Colonel of the 3rd Battalion of the Sherwood Foresters (Derbyshire Regiment), which rank he has held for the last fourteen years.

The Right Hon. Spenser Compton Cavendish, M.P. (Marquis of Hartington) is the eldest surviving son of William the seventh Duke of Devonshire by Lady Blanche Georgina Howard, fourth daughter of George, sixth Earl of Carlisle. His lordship, who was born July 23rd 1833, was educated at Trinity College, Cambridge, where he graduated B.A. in 1854, and had the degree of LL.D. conferred on him by that university in 1862. After completing his academic studies, Lord Hartington lost little time in devoting his attention to politics. Peace concluded with Russia, 1856, in the same year the Czar, Alexander II., was crowned with magnificent pomp and pageant, when the youthful representatives of our English nobility ex-

hibited to the assembled nations at Moscow the peaceful side of our national character. To this special mission to Russia, under Lord Granville, Lord Hartington was attached, and in March of the following year, 1857, he fairly plunged into the arena of politics when he was returned to the House of Commons as one of the members for North Lancashire in the Liberal interest.

The internal politics of England in 1859 were influenced by the warlike aspect of Continental affairs. The charge against Lord Derby's Government of entertaining Austrian sympathies produced little effect at the time, and was afterwards disproved in Lord Malmesbury's correspondence. The Ministers, however, soon lost the apparent popularity which they had enjoyed during the preceding session, and they insured their own defeat by the introduction of a Reform Bill which two of the most conspicuous members of their own body refused to support. The disfranchising clauses, which proved fatal to the Bill, may probably be attributed to the ingenuity of Mr. Disraeli, yet it is doubtful whether the most skilful tactics would have baffled Lord John Russell's vigilant hostility. The reunion of the Liberal leaders on some early occasion was inevitable and necessarily fatal to the Administration. At the opening of the new Parliament in 1859, the Marquis of Hartington moved a vote of no confidence in Lord Derby's Government, and it was carried by 323 against 300, and for the second time Lord Derby's Administration was

In 1863, when Lord Palmerston was in power, Lord Hartington, at the early age of thirty, was appointed a Lord of the Admiralty, and in April of the same year he became under Secretary for War, which post he filled up to the date of his chief's death. On the reconstruction of Lord John Russell's second Administration (1866), the Marquis of Hartington became Secretary of State for War, and retired with his colleagues in the July of the same year which witnessed Lord Derby's third accession to the reins of Government.

At the general election, December, 1868, Lord Hartington lost his seat for North Lancashire, but was immediately afterwards returned for the Radnor Boroughs, having first received the office of Postmaster-General in Mr. Gladstone's Cabinet. He held that office until January 1871, when he succeeded Lord Carlingford (then Mr. Chichester Fortescue) as Chief Secretary for Ireland.

His lordship went out of office with his party in February 1874, and when Mr. Gladstone, shortly before the assembly of Parliament in 1875, announced his fixed determination to abandon the post of leader of the Liberal party, a meeting of the members of the Opposition was called to appoint his successor. This took place at the Reform Club, February 3rd, under the presidency of Mr. Bright, when, on the motion of Mr. Villiers, seconded

by Mr. Samuel Morley, a resolution was unanimously passed to the effect that the Marquis of Hartington should be requested to undertake the leadership of the Liberal party in the Lower House. His lordship accepted the responsible position, and became the acknowledged leader of the Liberal party in the House of Commons.

At the general election, April, 1880, his lordship was returned as M.P. for North-East Lancashire, and on the resignation of the Conservative Government the Marquis of Hartington was sent for by Her Majesty the Queen to form an Administration, but this task (having been declined by him and Lord Granville) eventually devolved on the former leader of the Liberal Party, Mr. Gladstone, who constructed a Cabinet in which the Marquis of Hartington acted as Chief Secretary of State for India up to December, 1882.

Towards the close of that year some Ministerial changes were necessitated. The Prime Minister resigned the Chancellorship of the Exchequer which he had held simultaneously with the office of First Lord of the Treasury, and the latter appointment was conferred on Mr. Childers. On December 16th, Mr. Gladstone had an audience of Her Majesty and delivered up his seals, while his successor, Mr. Childers, delivered up his seals as the Secretary of State for War, which office he had held from the downfall of the Beaconsfield Administration. On the same occasion Lord Hartington was shifted from the Secretaryship of State for India and became Secretary of State for War in Mr. Childers's stead.

If we consider Lord Hartington specially in connection with his duties at the War Office we cannot find anything as yet performed by him to raise him above the dead level of common-place. Since his transfer from the India Office to the War Office he has done little or nothing to take up the dropped threads of Mr. Childers's hastily conceived and crudely executed Territorial Scheme. Mr. Childers left it incomplete and incomplete it still remains. Several of the so-called Territorial regiments have no 4th Militia battalions whilst the 25th King's Own Borderers has not even one. Nothing has been done to reorganise the Yeomanry and to bring them more en rapport with the Cavalry of the Line. The Volunteers remain unequipped and without either transport or commissariat, whilst a most incongruous system is in force in calling some volunteer corps by their old titles and others by the names of volunteer battalions of Territorial Regiments. Possibly Lord Hartington has sense enough to disapprove of Mr. Childers's wild and uncalled for scheme, and refuses to complete the farce initiated by his predecessor.

On the question of the Contagious Diseases Act, Lord Hartington, as War Minister, acted in a way that cannot be considered satisfactory. The opponents of these Acts were, in April, 1882, rewarded for their long perseverance by a decided victory. The parliamentary champion of the

movement, Mr. Stansfeld, raised a discussion on the working of the Acts and proposed a resolution condemning compulsory examination. Lord Hartington, while stating that the Government regarded the continuance of these Acts as an open question, hoped that the system then in force would not be abolished until some efficient substitute was suggested. Sir Stafford Northcote twitted Ministers with holding a vacillating attitude, and insisted that the Government were bound to tell the House their intentions, because to leave the matter as it then stood would be injurious to the public service, while the House ought to know whether these Acts were to be swept away. Ultimately Mr. Stansfeld's motion was carried by 182 to 110. Subsequently questioned by Lord Randolph Churchill, the Minister of War announced that a Bill would be brought in abolishing compulsory examination. The withdrawal of the Metropolitan police from carrying out the Acts was, in a debate on May 7th, emphatically protested against by many members as an unconstitutional suspension of existing law on account of a mere resolution which had no legal operation. This unfortunate pandering on the part of Government to a set of "faddists" has led to a fearful increase of disease in our military centres.

Pessimism is fashionable. To be hopeful for the future is the mark of a shallow, non-reflecting mind; to be content with the present that of a vulgar and unæsthetic; to despair of any improvement is to be philosophically clear-sighted after the manner of Heraclitus, and to vilify all present conditions whatsoever is the best method of proving one's own loftiness of aim and purity of aspiration. The modern military pessimist takes the most gloomy view of affairs and lays all the imperfections of our service at the door of the devoted Secretary of State for War. The Duke of Cambridge, in replying to the Earl of Wemyss in the House of Lords on the 15th ult., put the situation in a nut-shell:

"I have said before, and say again, that questions affecting military matters and the defence of the empire should not be, and they are not party questions in themselves; but they become party questions because of this question of finance. Naturally, with every Government, there is always an objection to imposing increased taxation, but without increased taxation you cannot have large establishments. If, therefore, you can get rid of this party question by coming to some understanding as regards finance I think it would be of the greatest possible benefit to the country."

Point d'argent, point de Suisse! It is the old story. No money, no man; and Government by party, and not Lord Hartington personally, must be blamed for the present generally admitted inefficiency of our military establishment, in which must be reckoned the Regular and Auxiliary forces alike.

ALURED DERBY.

### THE ARMAMENT OF OUR MERCANTILE SWIFT CRUISERS.

BY G. F. THOMPSON.



HE hostile attitude of a certain foreign power has, during the last few months, threatened to plunge this country into a war which would have taxed to the utmost her naval, military,

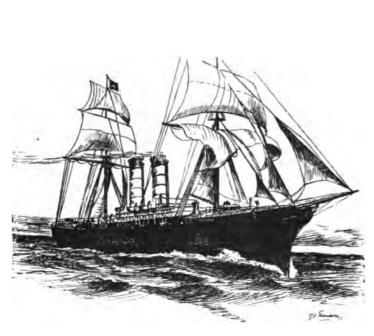
and pecuniary resources.

This country has fighting materials in plenty, if properly organised and placed, notwithstanding the effects of past years of bad judgment and false economy. The national resources are vast, and can be quickly drawn upon. This is a fact beyond denial. They have been tested over and over again, and history has told how Great

cantile fleet is so greatly in excess of those of other nations, the line of action commenced by recent measures if adequately carried out, must have the effect of greatly aiding the Royal Navy and increasing to an incalculable degree our national security. It might be observed, that as our great weakness generally lies in our want of guns of modern construction, it is a point to be carefully considered and remedied if the adoption of the late advantageous measures is fully carried out.

The four Liverpool liners that have been taken up by the Government, for arming and fitting out in the Liver-

THE NATIONAL STEAMSHIP COMPANY'S "AMERICA."



Bow View.



STERN VIEW.

Britain has come out of gigantic struggles with nations who have attempted to coerce her by threatening movements, that is to say, when the helm of state has been guided by firmness and decision.

A great deal has been said of late regarding the insufficiency of our Navy, and its inadequacy to cope with the naval armaments of other nations, strengthened as they are by all the improvements of modern science. The writers of these foreboding complaints have much show of reason in all their arguments.

The immediate necessities of the country, which have arisen owing to the sudden probability of a desperate war with a powerful and aggressive state, have been met by taking some of the fastest liners in the world to act as cruisers. It is to be hoped that those having authority in this important resolution, will not relax their efforts until the Navy is in a position to vindicate Great Britain's ancient claim to supremacy of the seas.

Considering that the numerical strength of our mer-

pool Docks, are the America, of the National Steamship Company; the Oregon and Umbria, of the Cunard Line, and the Arizona of the Guion Line.

As the America is most nearly completed, she will be taken as a sample of the general armament. The America is one of the latest liners built, and is claimed by her owners to be one of the fastest-going steamers afloat.

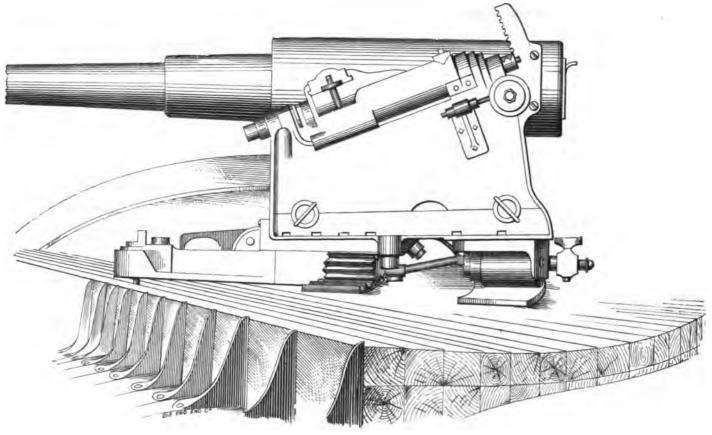
From her bow to her stern she measures four hundred and eighty and a quarter feet, her breadth of beam being fifty-one and a quarter feet; her depth of hold is thirty-six feet, and her gross tonnage 6,500 tons. In proportion to her length, the *America* has much wider beam than most of the liners. In this respect the builders have reverted to the old style. She is brig-rigged and has a clipper stem.

As the builders have sacrificed her power of carrying cargo to safety of passengers, this vessel is divided into no less than thirteen water-tight compartments, by complete traverse bulkheads extending to the upper deck in all cases, and, owing to this construction, she is a vessel that would float with any two of these water-tight compartments flooded.

With regard to her speed, she is guaranteed to steam eighteen knots an hour. On her trial trip, her speed was even in excess of her guaranteed rate; it may be mentioned, however, that on this occasion the elements were much in her favour.

The engines are driven by seven boilers, which work under a pressure of ninety-five pounds. These engines are three cylinder compound, one sixty-three inch, and two ninety-one inch, with a stroke of sixty-six inches. They are fitted with piston valves on all the cylinders; the crank shafts being constructed of Vicker's steel.

are five-inch calibre, and set upon Vavasour carriages, which are fitted with air cylinders for recoil of guns. The two brackets are cast hollow in one piece of gun-metal. They form the cylinder of the hydraulic buffer on each side for checking recoil. The rods of the pistons are in tension instead of in compression, as in those of most other guns. The slope of the side upon which the carriage rests is sufficient to enable the gun to run up at once after firing. It is fitted with the worm-wheel elevating gear. The slide is of the B pivot form. The piston head in the hydraulic buffers has three notches, with a stud, which works in a groove along the interior of cylinder, as the gun recoils the disc revolves and closes the notches so that the recoil cannot exceed a certain distance. The sternchasers



PLATFORM AND MOUNTING OF 5-INCH B.L. GUN.

One great point in her favour as a cruiser, is the amount of fuel she can carry; and it is computed that if necessary, she could stow a sufficient amount to last her during a voyage round the world.

In respect to her armaments, she is fitted with ten guns, five for each side of the vessel. Her bow-chasers are two in number, one on each side of the bow, and placed on a platform on the Dolphin deck, as represented in drawing.

These platforms are constructed with baulks of timber, ten inches square and fifteen feet in length; being bolted together and faced with iron plates, as shown.

The racers for the guns are placed as shown in plan of deck, thus giving a bow and stern fire. The angles of outer fire can be seen from position of racers. These guns

are similar in all respects, excepting the angle of fire; the racers being placed so as to allow of stern fire.

The main deck is supplied with six ordinary sixty-four pounders, three on each side of the vessel, two in front part, and one aft.

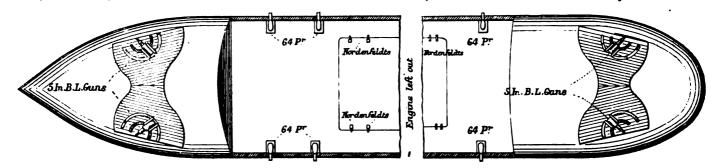
In addition to these guns the vessel is supplied with eight Nordenfeldts, four on each side of the hurricane-deck.

The defensive powers of these vessels, owing to a novel method of interior construction, which is so arranged as to protect the boilers and engines, will enable them, with their great speed, to render a good account of themselves. These remarks especially apply to the *America*, fitted out as she is with so many water-tight compartments, as before mentioned.

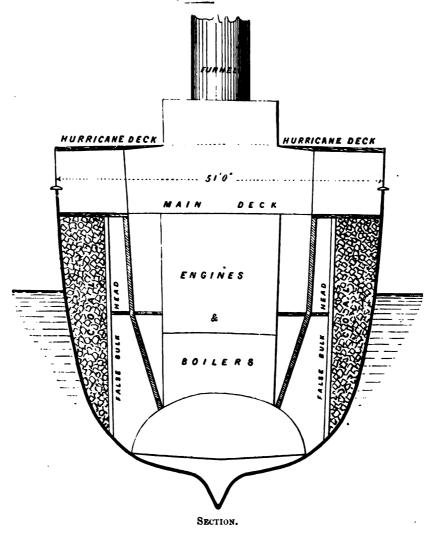
The method of protective additional construction which has been adopted, is effected by means of building a false bulkhead, as shown in Section. It will be readily seen that between the original frame and the false bulkhead a space, formerly occupied by cabins, &c., has been cleared, and, as it were, a kind of inner vessel been constructed.

shown in the section of ship. The usual use of this kind of fuel is for coaling the steamers, and it has of late come into very general use, as it is stated that it takes less room, and causes less waste than ordinary loose coal.

An inspection of these steamers was made by the Admiralty, on which occasion Admiral Seymour, who will



DECK PLAN, SHOWING POSITION OF GUNS.



The space left is very considerable, and admits of remarkably strong protection of the boilers and engines.

This protection is mainly composed of blocks of prepared fuel, compactly built up in space already mentioned, and intersected with armour-plates. The blocks of prepared fuel are composed of finely ground coal-dust, mixed with water and compressed by machinery. The coal-blocks are probably be in command of these cruisers when ready selected the *Oregon* as his flag-ship. She is, in point of size, slightly superior to the *America*, and has a similar reputation for great speed; in fact, her owners claim for her a better record by several hours on her trip across the Atlantic, and we believe that she is able to maintain her rate of speed in rough weather.

The Oregon is differently built in bows to the America. It is also stated that her engines are rather more powerful. As to armaments she is fitted out exactly on the same plan as already described.

The other two vessels, namely the Umbria and the

Arizona are, in point of speed, and in size and strength of engines, very similar to the America and Oregon. It is therefore, needless to repeat the description of armament and protection, as previous remarks on these subjects apply to all the four ships.



### NAVAL AND MILITARY NOTES AND QUERIES.

THE origin of the sail forms the subject of the following Kentish legend:—

It is related that in a small village on a sequestered shore inhabited by fishermen the progress of civilisation had already put them in possession of two or three barks, that obtained the most abundant fishery of all the coast. An old fisherman had a fair and accomplished daughter who assisted him in his occupation, and who by her beauty and her virtues had gained the heart of the finest youth in the neighbourhood, by whom she had been asked in marriage, and the day for the ceremony was already fixed. The young man accompanied his future father-in-law on his sea voyages; and sometimes the old mariner would relinquish his place to his daughter, to the no small satisfaction of our two lovers.

One day the amorous pair set out unaccompanied, and the young fisherman was busy with his fishing nets, while his fair companion rowed the boat with great dexterity. The sea was tranquil, the air calm and serene, and their fishing crowned with success. As it was yet too soon to return, the lovers allowed themselves to be allured by their strong desire of reaching a small island at some distance from the shore; but before they could gain the wished-for spot, the sky lowered, the wind began to blow a gale, the waves rose, the lightning flashed among the clouds, the thunder rolled, and the rain fell in torrents; while, to crown their misfortunes the oar escaped the hand of its fair holder, and the frail bark was abandoned without a guide to the mercy of the coming winds. Their afforts to regain their native shore were fruitless; their distance from it continually increased; and they soon despaired of ever beholding it again. The youth himself could scarcely swim, and nothing could have induced him to forsake his beloved mistress, who, in her terror, devoted herself to Neptune and all the gods able to replace them in safety. Their only remaining consolation was the hope of expiring together. Having resigned themselves to their fate, the young man fell on his knees; but the maiden, instinctively as it were, defending her lover and herself from the wind and rain, raised above their heads the white veil she wore, in the same way as at a subsequent period, Virginia sheltered her tenderly beloved Paul. How long they remained in this trying position is not known, but suddenly the wind abating, inflated the white garment that covered them, and impelled them towards the coast

which they had imprudently quitted, and which they had despaired of ever being able to regain.

The old mariner, uneasy at the prolonged absence of his children, and more especially in such dreadful weather, ran to the top of the highest hill, endeavouring to descry them, and gave way to despair when he could not discern any object on the horizon. But suddenly his attention was arrested by a small white speck, which gradually increased in size. At first he was unable to comprehend the nature of the strange form presented by the floating substance, which resembled a small hemisphere; but after a few minutes he discerned, beneath the refulgent dome, fluttering in the wind, the persons of his beloved children, and the figure of his daughter engaged in fervent prayer with eyes and hands uplifted. The youth was kneeling before the idol of his heart, intently gazing on his guardian angel, who, with an air of inspiration, was imploring Providence for rescue. In this attitude, and without the aid of an oar, the little bark, impelled by the wind alone, at last reached the shore. The young people immediately rushed into the arms of their sire, who with tears in his eyes, and with prophetic inspiration exclaimed, "The future is unfolded to my view! Art is advancing to perfection! My children, you have first discovered a powerful agent in navigation. All nations will cover the oceans with their fleets, and wander to distant regions. Men differing in their manners, and separated by immense seas, disembark with surprise upon peaceful shores, whence they import foreign treasures, superfluities, science and art. Then shall the mariner fearlessly cruise over the immense abyss, and plough his way across unknown seas; then will he brave with facility the furious tempest, when earth and sky are in agitation, and when his vessel becomes the sport of the waves. Such is the audacity and energy of the Promethean race; the divine fire burns in the human breast, and the greatest perils will but influence their dauntless courage."

When the old seaman had recovered from his emotion, he blessed the happy incident that had restored to him his children, and reflecting on the motive power to which it was owing, determined to make use of it in one of his excursions, by fixing a pole in the middle of his bark, and attaching to this a piece of cloth, to arrest the wind and compel it to subserve the object of his voyages. After several attempts he succeeded in the completion of a small sail-boat, which he could direct at pleasure, and thus was the sailing ressel discovered.

#### THE DECORATION OF "THE ROYAL RED CROSS."

#### MRS. MAISTRÈ.



EARS ago His Majesty King William the Fourth caused regiments to be told off to counties in which they were to recruit. Eventually they recruited wherever they best could, and the territorial designation took second

place after the number. Nowadays the number has been eliminated, and the territorial title alone remains, to the confusion of old soldiers. Probably in another half century, if not sooner, we shall revert to the more simple number, and for a similar reason, emphasised by the fact that a growing population, increased facilities for moving, and the consequent love of change, are rapidly removing ancient landmarks. The old 88th has, however, for many years past been a distinctly Irish corps, more Irish than the 18th or 87th. As such it has gained a high reputation as a fighting corps, both in the field and in quarters. Its colours were already blasoned with a long roll of battles when the 94th became incorporated with it, bringing to the Connaught Rangers a further glorious record. In last month's number of the Illustrated Naval and Military Magazine it was my welcome duty to refer to the heroic conduct of a soldier's wife of the 94th; and again on the Roll of the Red Cross Order is found a similar case in the same regiment. The history of the corps during the campaign is so bound up with the act which brought royal recognition to Mrs. Maistrè that the two cannot well be separated here.

When the news of the Isandlwhana disaster reached England early in 1879, the 94th were placed under orders for South Africa, and landed at Durban on April 2nd; on July 4th they were in action at Ulundi, and in November they were engaged in the storming of Sekukuni's stronghold. On that occasion Lieutenant Dewar of the King's Dragoon Guards, who was accompanied by Privates Flawn and Fitzpatrick of the 94th and by six men of the native contingent, was badly wounded; he was being carried down the hill by the natives when some thirty of the enemy appeared in pursuit at only a few yards distant. The native contingent promptly bolted. But Flawn and Fitzpatrick brought in the wounded officer, the one alternately covering the retreat and firing on the enemy whilst the other carried Lieutenant Dewar. These good soldiers both received the Victoria Cross.

The operations against Sekukuni having been concluded, on December 5th, 1880, the headquarters of the 94th, leaving an officer and fifty men at Leydenburg, marched about 200 strong for Pretoria. Whilst on the march they were, on December 20th, attacked at Bronkhorst Spruit, where Lieutenant and Adjutant Harrison, with fifty-three non-commissioned officers and men, were killed, and Lieutenant-Colonel Anstruther, Captains Nairne and MacSwiney, Lieutenant Hume, and eighty-eight noncommissioned officers and men were wounded. All the wounded officers died, with the exception of Lieutenant Hume. The colours were carried on that disastrous day and brought out of action by Colour-Sergeant Maistrè and Sergeant-Master-tailor Pearce, and were eventually torn from the staves and concealed under the clothes of Sergeant Bradley and Conductor Egerton, who thus carried them safely to Pretoria. Both men were awarded the medal for distinguished conduct in the field, and Egerton was subsequently promoted to a commission in the 94th.

Two medals for distinguished conduct in the field were also awarded to Private Whalen and Lance-Sergeant Sharkey in recognition of special gallantry during the siege of Leydenburg and Standerton.

The most advanced post held by the regiment was Marabastadt, garrisoned by Captain E. S. Brook's company. Hearing of disturbances, this intelligent officer at once collected cattle and supplies, and was thus enabled to hold out for ninety-six days when besieged. For his gallant defence he received a brevet lieutenant-colonelcy.

The three years' campaign in South Africa, during which the 94th was broken up into numerous detachments—always most trying to the efficiency of a regiment -had severely tested the equipment, which was chiefly held together by means of bits of string and other homely devices: nevertheless on reaching home the corps was fit for inspection, thanks to the soldierly instinct of the commanding officer and the splendid discipline of every officer and man under his charge. But the deserved "Well done, -th," that makes a soldier's heart leap to his mouth was not forthcoming from the authorities. The regiment landed, was hustled off to the Curragh, arrived there in the middle of the night, and, owing to the good comradeship of the 60th Rifles and 105th, did not go supperless to bed. Then the essentially Scotch regiment was tacked on to an essentially Irish one. Well,-we are a great nation. Our War Office seems to do its utmost to try the loyalty of our troops when a word of due praise, a moment's just consideration, the slightest indication of a notion that our army is made up of human





MRS MAISTRÉ

Inwir Brothers London F.J.

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units, would add an hundredfold to its efficiency. Some day perhaps the War Office will have its mauvais quart d'heure—then may I be there to see!

It was in the action of the 20th of December, 1880, that Mrs. Maistre, wife of the sergeant who carried and saved the colours, fairly won the decoration of the Royal Red Cross Order, by rendering valuable aid to the surgeon at a critical moment, and during the four months that the wounded remained prisoners of war. "The assistance," runs the dry official report, "rendered by Mrs. Maistrè and Mrs. Fox, the cheerful resignation and laudable fortitude with which their hardships and sufferings were borne, are beyond all praise." A man may perhaps partly imagine the feelings of a woman who finds herself unexpectedly under fire: friends falling fast around her, dead, wounded, and dying; her husband within sight at the post of duty, singled out by the flag he bore as a special object of the enemy's fire. Had she succumbed to the terror of the situation she would still have earned our sympathy and interest. But specially nervous natures

have their compensating advantages, and seem to grow strong under circumstances which would paralyse ordinary folk. And so it was in this case. Fear had no place in presence of the higher sense of duty, and only the heroine remained. Instead of quailing under the hail of bullets that for half an hour rained upon the surprised detachment from some of the best rifle shots in the world, Mrs. Maistrè calmly went about her true woman's mission of soothing suffering, rendering help which men were powerless to give. A decoration bestowed by the Queen, much as we may honour it as such, is but a trifling indication of the deep feeling that every man must instinctively entertain of the respect due to such conduct. "Nobility has in these days no true existence save by virtue of noble actions" is the avowed principle of the Prussian Knights of St. John. The Dame Chevalière of that most chivalrous order, with her title and heraldic Seize Quartiers to boot, must give place in true nobility to this wife of a soldier of a British regiment of foot.

CHAS. J. BURGESS.



# NAVAL AND MILITARY NOTES AND QUERIES.

An ancient manuscript gives the annexed establishment of the army of King Edward III. in Normandy, and before Calais in the 20th year of his reign:—

				At Per Diem.							
My Lord, the Prince				:	£1	0	0				
The Bishop of Durham					0	6	8				
Thirteen earls, each					0	6	8				
Forty-four barons and banneret	s, ea	ch			0	4	0				
1,046 knights, each					0	2	0				
4,022 esquires, constables, centenary and											
leaders, each					0	1	0				
5,104 vintenars, and archers on horse-											
back, each					0	0	6				
15,480 foot archers, each					0	0	3				
314 masons, carpenters, smiths, engineers,											
tent-makers, miners, armoure	rs. 01	וחו	ers		3d.	to	18.				
and artillerymen				۱,	٠	••					
4,474 Welsh Foot, each					0	0	2				

THE denomination of CAPTAIN and LIEUTENANT, applied to officers commanding small bodies of men, equivalent to our companies and troops, was scarcely introduced into our armies before the reign of Henry VII. and Henry VIII., where we find them borne by the officers commanding the Yeoman of the Guard, and the Band of Gentleman Pensioners. In the list of the army employed at St. Quintin's, A.D. 1557, the cavalry was divided into troops of 100 private men, commanded by a captain, lieutenant, and standard-bearer, having each a surgeon, a quartermaster, a chaplain, a trumpeter, and a smith. This list is the first instance where a body of cavalry is described under the term "troop." In the same list above quoted, the companies of infantry consisted of 100 private men, a captain, lieutenant, ensign, quartermaster, sergeant and drummer.

The earliest period in which we find the term "adjutant" used in our army is in the list of the army reviewed upon Putney Heath in the year 1684.

# THE LONDON LIFE OF THE UPPER TEN THOUSAND.

BY MAJOR W. J. ELLIOTT.



HE opening of the session of parliament is the advent of the "London Season."

Amidst all its gaieties and all its pleasures, how many hopes are fulfilled by this "London Season?" How many destinies are decided by it? How many schemes connected with it succeed?

How much ambition is satisfied by it? How many friendships are formed, how many enemies made? How much is there of heartburning, jealousy, or slight?

The man who hopes to gain a position in life or "Society" finds the realisation of all his dreams, or bitter disappointment. He who aspires to win distinction in the "House," and stamp himself as a man of mark, knows he is prominent before the country, or misses his opportunity, and departs to broad over the fickleness of time and events. The place-hunter, who "comes up" with the aim of gaining a position, finds himself safe, or retires disgusted with baffled efforts and the unreliability of human promises. Parents who "bring out" daughters, in the expectation of securing for them eligible husbands, know them to be promised wives, or return to country seats with hopes deferred and lightened purses. The professional livers on "The Upper Ten Thousand," count their gains, or fly to escape the importunity of duped creditors, to try their luck elsewhere.

The influence of the "London Season" upon his life or circumstances, is known best to each member of "Society."

In the early days of June, it is a pleasure, even in London, to rise betimes, and do your constitutional in the "Parks of Piccadilly." There is not the wide expanse of country, with the varied hues of fresh summer foliage to meet the eye in every direction, or the clearest of crisp morning air to quaff with delight and exhilaration; but there is a good strip of green sward and there are green trees. The atmosphere is yet unclouded with smoke and dust, for the housemaids are scarcely up. The kitchen fires are yet unlit. The cabs and omnibuses are barely astir.

Many are here in the early morn, trying by system to keep health "In Town," and some of the "London Life of the Upper Ten" may now be seen.

A spot is chosen by an observer, near the statue of Achilles. Riding into the park are Statesmen, and men of many avocations, early risers by habit, who prepare themselves for their daily toil by healthy exercise. Amongst them are Cabinet Ministers, Bankers, Merchants, and others of the upper busy life of London. Here comes one, with a

clearcut, smiling face: he is a great Judge, his young son is galloping on horseback by his side; the fine fresh features of the man are radiant with the enjoyment of his morning's exercise, he is laughing and talking gaily with the handsome boy; the lad is all fun and familiarity, he knows not fear or shyness for the great judge, his father, who is rightly training his son to look upon him as his companion, and one to whom he can always open his young heart in all his troubles. An hour or two later the now cheerful judge will pass to his judicial seat with serious aspect; bar and court will rise and bow in deferential custom, he will gravely bend himself in return, and commence his hard day's work of import to his fellow men.

Ministers of State pass by, with grave, earnest faces; who seem weighed down with the cares of office. They are taking by rule their morning's ride to physically fit them for the duties of their arduous office. A look will show their thoughts are not here; they are thinking deeply. Morning after morning come these men with thoughtful countenances, their minds on their country's service. Why these great men work so hard, puzzles the spectator greatly as he watches them. Many are well born, have riches in abundance, have all the means of a pleasurable enjoyment of life, yet take upon themselves cares, anxieties, and hard work, for what? Is it for a public name or reputation (for it is not to obtain the means of a livelihood) or is it for the pure love of work in their Both of these objects sway their country's service? motives, one is fain to say; although amongst them are men of high and noble minds, whose aims are above a public name, who work for their country's sake.

Here are young ladies whose horses are cantering at their father's side. His animal is at a rapid trot. These ladies are really enjoying the exercise, for they have freedom from the jostling noonday crowd of equestrians; their faces are fresh and happy looking, they are taking good means to preserve the roseblush on their cheeks while the "London Season" of late hours lasts; the moral courage which brings them here so early, repays them well by a good appetite for breakfast. Fresh and strong for the day will they be, through their morning's ride.

About nine the park is thinning: the daily workers have departed for their early meal, others are following. The observer goes too.

Breakfast over, he gets himself up "en règle," for is he not about to go amongst the "crême de la crême" of both sexes?

By the grey moustache of the observer, it is evident he has passed the noontide of life. What he will soon see here,

will remind him of similar scenes in days long gone. He will see youth, maturity, and even old age, getting that pleasure from life which they are able to obtain by ample means of providing for it. Discontent or jealous feeling at the happiness or enjoyment of others, is to find no place within him; it matters not how such happiness is procured, or how they are partaking of it. He must be a cynic indeed, who is to have one spark of envy at all that he will here see of the "London | Life of the Upper Ten Thousand." He should be thankful for what he has—for health above all.

The observer enters at Hyde Park Corner about 10 A.M. At this time, possession of the park is held by nursemaids, with patrician children in arms, in perambulators, walking,

or toddling. There are just now, a large number of aristocratic juveniles here: some are amiable, some are not, for they are treating the nursemaids with airs of command quite regal, no doubt they are just beginning to know their position, and to show it. The nurses are trying to get "Lord Edward," " Lord William," "Lady Eveline," to obey them, the little Lordlings or Ladylings rebelling with airs of scorn and defiance; the entreaties of the nurses are heard. The spectator does not like the way in which some of the little aristocrats behave, and feels he would like to have them under his care for a month



ARISTOCRATIC CHILDREN.

or so; nevertheless, he notices near him an agreeable contrast. There is a quiet, gentlemanly little fellow, talking most familiarly to a policeman on duty; the tiny man is particularly well attired. The conversation is listened to. The small chap is asking all sorts of posing questions of the policeman, and it is rather fun to hear the man's replies, which the little fellow seems to take as gospel. The Robert and the boy are evidently on terms of good fellowship. The policeman frequently addresses him as "My Lord." It is pleasing to observe the little Lord has no airs of pride about him, and the thought comes that he will some day be a worthy representative of the great name his father holds. All the aristocratic children are beautifully dressed. Owing to the vanity of human nature, this may perhaps account somewhat for the airs

they show. Many of the young patrician ladies give promise of great beauty, their lithe figures are well-proportioned, their limbs are straight, they have long, thin ankles, well-shaped feet, and well-formed shoulders: a comparison is quickly drawn as between the race and the cart-horse, and it would seem there is something in breed although democrats would have their ideas about blood.

Further up the park, in a retired part near the back of Hamilton Place, is a knot of aristocratic wives and mothers in close confab under the trees, talking no doubt of family matters, mixed up with a trifling amount of, shall it be said, scandal. Listeners must not approach too near, or they will perhaps hear something not to their advantage. Close to these aristocratic dames, are a number of well-

dressed children at play under their mothers' watchful eyes; their attendant nursemaids stand at a distance. There is great restraint of movement. Freedom of limb is subordinated disarrangement of dress; and one is reminded of nut-brown, strong-limbed children on the country commons, whose healthy romping play is so different. It is striking to witness the politeness with which the patrician children behave to each other; young as they are, their training in this is remarkable.

The wives and mothers retire to dress for "the Row," so one makes a move down the park and

takes a seat at the corner, near the entrance of the ride. It is about half past eleven, the equestrians are coming in fast, the nursemaids and aristocratic children are quickly dropping out. Amongst the earliest arrivals are several hard-featured yet handsome women, splendidly mounted, but not accompanied by the usual top-booted groom. At a glance it is seen they are those who are sometimes called "the pretty horsebreakers;" they ride and show off their horses right well; no one notices them, they pass up and down looking uneasily about, they do not seem to be either comfortable or happy. Poor women! What a strange life they have taken to. The ladies who frequent the "Row" are very hard on them; some of these "horsebreakers" are of respectable character and parentage notwithstanding.

It is going to be a heavy day here, for the weather is fine. "The Ride" has been well watered, the police on duty are beginning to have enough to do to see that the horses and carriages do not infringe rules; coolly and well they do their duty. In streams, from every direction, come in carriages, horses, and people on foot. The carriages deposit their occupants at the corner of the "Row," until the place becomes a sight to be seen in no other capital in the world.

There is the "Bois de Boulogne" for Paris, there is "Unter den Linden" for Berlin, the "Prater" for Vienna, and the "Corso" for Rome, but there is no "Row," or anything like it elsewhere.

"The Row," footpaths and Ride, is filling fast; people are dropping into chairs. All along the paths on both sides, the railings in front are hung with languid swells, who are leaning over, watching or talking to fair riders. How lovely many of these look! Just see what beautiful, lithe, and graceful figures are those which sit their splendid horses like female centaurs! The training of a life is in their seat; their steeds toss their heads and curvet, as if they are aware of the beauty they carry so proudly. What light hands are those which guide them! The well-broken animals canter gracefully and show off their paces; numerous are the remarks of admiration from all sides, for so much female loveliness and equestrian skill cannot be equalled in any other spot. Several of the fair riders are decidedly inclined to "embonpoint;" they are doubtless under the doctor's orders to ride for the purpose of reducing bulk; their medical men are cunning, for by this advice, so perseveringly carried out, they secure a certain annuity for daily consultation on the fears of their patients, who would be slim. On they come! Equestrians of every degree, in lines like troops of cavalry-chatting, laughing, and enjoying themselves. Well they may, for the sight alone should make them cheerful. There are horses of every colour, and almost every type, except the dray, from the powerful animal for the heavy weight capable of drawing a plough, to the handsome thorough-bred, even to the perfect Shetland pony for the little lady who so confidently sits it.

While the pageant of noble and other equestrians and the tide of walkers are passing, one takes his observations. There is a considerable mixture amongst the riders. Here is the noble Duke, Earl, or Lord, side by side with the notorious Jew money-lender; a noble Lord or two noticing him with a distant nod, or not doing so at all. The money-lender is trying to look quite at his ease, he fails: to begin with, he has never learned to ride, the Lord has. The money-lender's knees are much off the saddle, he jolts about loosely, his hands grasp the reins uneasily, he is altogether uncomfortable. Those who were so polite when dipping into his money-bags last week, don't know him now; no one but of his own fraternity speaks to him. Try to put on what appearance he may, he is not of those with whom he is mixing. Why does he come here at all?

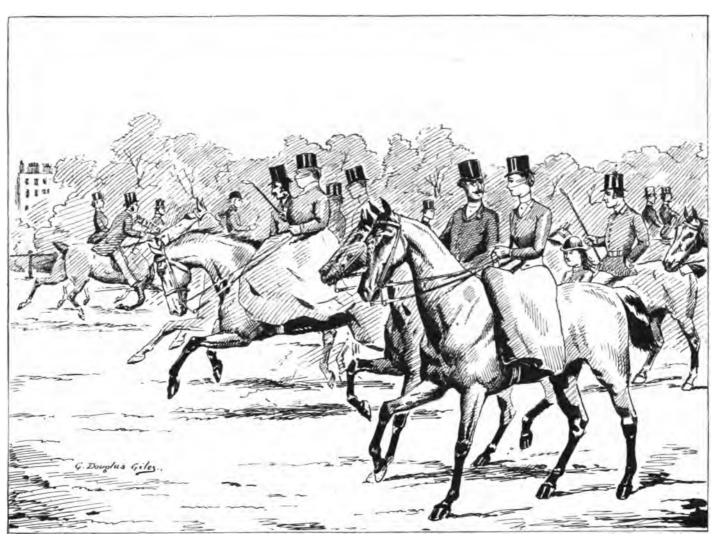
Ah! that is the question; some of the noble personages here feel a little queer when they see him, and know that a certain bill is overdue, and has not yet been met.

One recognises many who are prominent in "Society," some are noted as politicians or promoters of art and literature. Here is the Duke of ----, pretty well mounted, his ducal nose is red, so is the ducal face; his Grace's hat is seedy, illbrushed, his hair is slovenly, he does not look like a duke at all; he is the antithesis of his Duchess, who is tall, graceful and majestic. Here comes the Earl of ----, with his patrician nose and aristocratic air: one can see he is somebody, he seems so haughty, but he is not so, it is only his Lordship's manner; he has been brought up to look haughty, like the little ones seen a short time since glancing with scorn at the passers by. The Earl is known to be a most kind-hearted and excellent man. Here is also the Earl of ----, looking thoughtful, quiet, and, as usual, amiable; what a rich fund of human kindness is in that man's heart is only known to those who have received benefits at his hands; no man living has fewer enemies. Why did he go to India to return with a shaken constitution? Certainly not for riches or for title, for he had both, he went to work for the public good, to get at the end of his career obloquy, and his only payment a clear conscience; he is in the Cabinet now, one who sees him here is glad of it. Who are those lively young ladies who gallop about, and who laugh so boisterously? Ask the policeman regularly on duty, and he will tell you. Who is that peculiar-looking gentleman on a dapple grey pony, his clothes cut to great perfection? It is Mr. —, the great tailor of - Street; there is even an aristocratic bootmaker amongst the gay throng in the Ride, and looking, too, almost to the manner born; but this ride is free to all alike, all are enjoying, or trying to enjoy in their own way, this mixture with "Society." Sometimes is seen, when in London, in a line of noble Lords and Ladies, his Royal Highness the Duke of Connaught, his Duchess is not amongst them. Her Royal Highness does not often patronise the Ride. Where is the Royal Prince, his eldest brother? Just getting up to breakfast, perhaps, for His Royal Highness usually goes to rest late, and often takes it out in bed when his country's Judges, Cabinet Ministers and others are having their morning's constitutional. Although the Prince will not be in the "Row," he will perhaps be seen on the front seat of the first coach of the Coaching Club meet to-morrow. His Royal Highness has been lately identifying himself much more with all that is going on in the country, by this he has been taking a higher place in the affections of the people.

How full the "Row" is to-day. Here are people of every degree amongst "The Upper Ten;" young Lords, old Lords, young Honourables, old Honourables, prominent M.P.'s, not at all prominent M.P.'s, young Swells old Swells—got up most expensively, well wigged, well dyed, well padded and marvellously well preserved;

trying to keep on their old legs and retain their swelldom to the very last; poor old souls, it is their weakness in their old days, let them do it. The young Swells here, call them old fools, but are there any young fools about this morning? There are around, various grades of swelldom: baronets, naval and military Swells, the naval men, like "Charley" Beresford, very jolly as usual; the military look neatly got up, and are generally rather fierce of aspect, heads thrown back, chests thrown forward, as per regulation on parade.

to the portly gentleman with the rubicund face, who is seated in his wooden chair of State under the trees, and bids him a rather deferential "good morning," the salutation is patronisingly acknowledged, the new-comer falls back into the general circle and joins in the conversation The King of the Court, who remains seated, uses the letter "I" profusely in all his remarks; all who talk with him do so with deference, as though what he said was law. The conversation in this general circle, is entirely of club life, very clubby; of betting, of racing, of women, and



SOME FAIR EQUESTRIANS.

Near me, seated under a tree, a little back in the shade, is a portly gentleman, whose face has been drawn in Vanity Fair. It is rubicund. How many years has he been seen in that same spot, morning after morning, at the same hour? He holds a regular levée, it is a peculiar levée, it is of old swells, bachelors and widowers of all sort and sizes. Each old buck is a study in himself; all are well got up, and by their manner and air they fancy themselves much; they are all very oracular. As each arrives and joins the circle of the little Court, he goes up

one hears some ungenerous remarks about some of the ladies passing. The grapes are sour, my middle-aged and ancient friends; you are well got up, you are well preserved old beaux, but you cannot now compete with the ambrosial locks of youth. Old swelldom, you have had your day, envy not the happy lot of the young man at that fair creature's side, and cast not nasty remarks at both, as "two young idiots," for you have had your youth and spoony days, and cannot live for ever.

This knot of old dandies do not seem of the general

ruck of society here, they are essentially club men, whose lives are of the club. Why are club men generally so very hard and cynical about the opposite sex? Experience of a not very grateful kind, is perhaps the reason. But coming near is something which makes one's middle-aged eyes glisten: there is approaching one of the loveliest girls that man ever gazed on; around is heard, "Here comes Miss C--, is she not lovely? And so bewitchingly dressed too." By her side is a young man, tall and very handsome, dark moustache, short wavy hair, fine dark eves. He is looking down in his fair companion's face with a most spoony expression; he is very far gone indeed, and no wonder! She, too, is evidently hit pretty hard; sharp eyes observe fingers meet once, and not quite by accident. Behind is perceived a majestic-looking lady, by

the likeness evidently the mamma, rather, as is now more proper to say "the mother." She is still a very handsome woman, a younger daughter is with her, the mother nods right and left. hats are doffed and bows exchanged, party stop and talk near. The elderly lady is haughty, very the young man and the young lady take the opportunity spoon



A Few of the Court.

when up rides a wonderful old creature in the shape of a man, splendidly attired, but the dye and false hair cannot hide his withered face, or conceal his years. To him the mother is most affable: "Good morning, Sir Charles," she says; he replies, raises his hat, and turns with a smirk on his old face to the young lady, who colours highly. The old boy is evidently on terms of almost proprietorship with the lovely girl, and the handsome young man backs away, looking greatly disconcerted and annoyed. He is a "detrimental" or younger son of a noble somebody. He has nothing to live on, and no prospects in particular; inquiries made discover that the old boy and the young lady are "engaged." is the old thing; at the end of the season, the young man and the young lady will part, and their first love's dream will end. She will return next season a wife, be

the possessor of a great establishment, and one of the leaders of fashion. Is there no sacrifice here? one asks. "My friend," my informant replies, "we don't talk of sacrifices when there is a chance of a girl getting a baronet with fifteen thousand a-year."

The "Row" is now much crowded. It is lined from end to end with pedestrians and sitters; the conversation is incessant, it goes on with charming openness, a vast number seem to know each other, they meet but to talk about their daily life—of the balls, soirées, garden parties, the opera, the academy, and other places they were at yesterday, or are going to to-day, or to-morrow. The conversation as a rule is genial; it is pleasant to hear. Politics do not seem to be much discussed in "the Row;" flirting and spoonying go on to any extent amongst the

young. The elderly look complacently on, for have they not had their day at that fun here? and are reminded of many pleasant hours spent in the pastime.

The two young men next me, so perfectly dressed, are telling each other what they won at cards last night at their clubs; they are very blase looking young gentlemen, they have a wearied look about them, and talk a great

deal of racing, betting, and much scandal about certain members of both sexes of "The Upper Ten." My neighbours on the left, are a lady and gentlemen conversing about other people's coats, hats, and the cut of their garments; one tires of this, and makes a move to another vacant chair, at which one gets a little treat of some most refined and intellectual talk. But a knot of persons come up and join in general topics; the opportunity is taken to observe the beauty of the fair portion of our morning companions here. Who does not admire female loveliness? A beautiful woman is the most perfect thing in all creation.

Now, if any one wants to see perfection in beauty represented by Englishwomen, let him come to the "Row" on a "full" day. English female beauty of every type is here, from the young girl of seventeen to the

elderly lady with snow-white hair, but still the embodiment of English matronly womanhood. What Englishman is not proud of his countrywomen whom he sees here? None are like them anywhere else. One can see beautiful women in plenty in other places, but not the healthy, open, honest faces of the Englishwomen. See, here comes one, a girl of eighteen, evidently "up" for her first season; the old fresh-coloured gentlemen by her side is, by the likeness, her father, "The Squire." Only look at the girl!

dressed with exquisite taste; her face and figure perfect, too, in their style; figure slight, exceedingly graceful in form, face oval, rather pale, a slightly aquiline nose, short upper lip, mouth small and a little haughty perhaps in expression; she has perfect self-possession and quietness of manner. She is of a very refined class of beauty, and would keep one on one's best behaviour at all times. By her conversation she is intellectual as well as refined; there is about her that something which trains the English-



THE BARONET, HIS FAIR ENGAGED, AND THE "DETRIMENTAL."

What a perfection of form; tall, upright, with well-developed yet undulating figure and a natural and unrestrained freedom of movement; her laughing blue eyes tell she is much enjoying herself. Her face is full, her features are regular and handsome, a fresh colour is in her cheeks, her rich brown hair is well arranged, her dress fits well. She is the ideal of a country gentleman's daughter, and of an English girl of the country type. She is by no means the only one in the "Row." There are many aristocratic beauties present. Here is one standing close to me

man to be, of all men, the most respectful and chivalrous to women, be they who and what they may. The beauty of one's countrywomen here, pleases one greatly, but what is to be admired beyond everything, is their grace, their modest yet open freedom of manner, that innate consciousness of purity and virtue, which is at once their charm and their protection.

It is getting on towards two o'clock, and there is a general movement towards the entrance of the park; people are shaking hands, and invitations are given for lunch. I, too, prepare to leave, but stay awhile to see the rush for carriages and cabs, and to watch the riders wending their way homeward. Dukes, Marquises, Lords, and Ladies are leaving, so I go too; I have an invite to luncheon, and receive a cordial welcome from my hospitable hostess. Her husband, like a great many more, lunches at his club, and will call in at the "Victoria" before he returns to dinner. The lunch finished, the genial hostess retires to prepare for her morning calls, which are due to "Society;" and for her shopping, which is due to her household. I stay and have a quiet cigar with one of the sons, and soon afterwards visit another married lady acquaintance and remain to her little "drum," or five

o'clock tea, and enjoy a chat with some of the ladies of the "Upper Ten" who have dropped in.

The carriages are waiting, however, for the afternoon calls and drive, so I depart, re-enter the park, and station myself on the pathway next the Piccadilly entrance. I observe that the carriages with their occupants are fast rolling in. Is there ever to be any cessation of the stream of horses and carriages which is flowing towards me? So vast is the number at last, that they are four deep in the drive, and are obliged to stop and then go on at a walking pace. What a spectacle of the wealth of the "Upper Ten!" What carriages! What harness! To say nothing of the perfectly equipped grooms and coachmen! The number

of coronets on the panels of the carriages show who are out to-day. It would almost appear as if the whole of aristocratic London are now here. There is every class, every design of carriage, from the elegant landau, to the veritable "one-horse shay," with its second-class occupants out for a drive; who think it a right thing to be amongst the very best of "Society," and to talk about it too! Round and round they all drive. What a curious afternoon's enjoyment one thinks; is it a duty or a pleasure? Perhaps it is the first, to which the second is made subordinate, because it is the "correct thing" in "Society." If any foreigner wishes to see at one glance an indication of the wealth and power of the English aristocracy, let him come to "The Drive" on a fine day in the height

of the season, and he will leave the park quite satisfied.

But the police are parting in the centre the four rows of carriages, and are keeping an open space down the middle of the roadway; what is it for? Presently a mounted constable comes trotting quickly along, soon followed by a carriage and pair, containing Her Royal Highness the Princess of Wales with two of her children. Albert Edward, every Englishman, married or single, is in love with your Princess, and would protect her from every harm. Does your Royal Highness thoroughly appreciate the prize you possess? Yes, you do, notwithstanding all au contraire and you are proud of her grace, of her

beauty, of her refinement, and better than all, of her general popularity with every class, high and low, rich and poor.

How her Royal Highness smiles and bows to doffed-hatted "Upper Tens," just witness how pleased every one looks to see her! Hear the remarks about her, the ladies near me, say "Is she not amiable and lovely?" "Yes and she will never be spoiled by either flattery or adulation," is the mental reply of the observer.

Amongst the swell equipages here, there is a beautiful pair of skewbald ponies and low phaeton, driven with consummate ease by a lady much powdered and painted, who is accompanied by another. The groom is perfect, they attract a good deal of attention. The next morning

the same equipage will draw up at the stage-door of one of the theatres in the Strand, two ladies will alight and go in, they will have small books in their hands. Their faces are now yellow, their hair and general appearance, frowsy and untidy, the groom will jump down and stand at the ponies' heads, as proper. The observer, who has seen the ladies in the park the previous day, inquires of one of the unwashed close by, who they are. He is told, "Oh, only two o' them ere French actresses, that's all, and they two h'aint much account neither." How curious, too, that on this same day, and amongst the same people in "The Drive" is seen a perfect pair of cream-coloured ponies with small carriage, groom correct, driven by a bold-looking, but very handsome woman. A



THE COUNTRY SQUIRE AND HIS DAUGHTER.

few days after, she winked a most knowing wink at the particular observer, who saw her returning from "The Drive," in the classic regions of Pimlico. The wink was not returned.

In "The Drive" there does not seem that exclusiveness which in the morning exists in the "Row." Celebrated London actresses are here, in nice broughams too. So are some other ladies who are alone, but whose appearance, endeavour as they may to conceal it by trying to look modest, tells the tale of their position.

The park is left by the observer a little earlier than usual, a hurried dinner, and a return to it, will find the scene once more changed. Through every part of the park are now rolling carriages, filled with persons in evening dress; gorgeous equipages are some of these carriages, with wigged coachmen, powdered-hair footmen, with flesh-coloured stockings, silver-laced uniforms, and silver-mounted sticks, all denoting that some "grandee" of the "Upper Ten" is going out to dine. A great many of the horses are evidently hired, the broughams are so, too, for the "Upper Ten's" horses and carriages have already done a good day's work in visiting, shopping, and the afternoon's drive.

The observer sits watching until he grows discontented at the sight of so many diners out, and feels disgusted that he has had no invite to a good dinner and the opera or the ball to follow. He bottles up his discontent, smokes his cigarette and grows thoughtful.

He meditates on the pageant of pleasure-seeking, and pleasure-loving folk he has seen this day; he knows he has not even witnessed all "The London life of the Upper Ten;" that there has been no meet of the Coaching Club, with the Prince of Wales on the box of the leading coach, to proceed to their lunch at the Alexandra or Crystal Palace. He knows that there have been garden parties; there is Hurlingham, with its fashionable pigeon-matches, not quite the sport for ladies to witness. There are Polo

contests, cricket-matches at Lord's and Prince's. There are the flower-shows at the Horticultural Societies, the Opera, and with these, many other arranged pleasures.

The shades of evening are deepening fast as he thinks. The park, which has to-day been the busy scene of so much gay life, is getting deserted and dull. He ponders upon what a round of pleasure is "The London Life of the Upper Ten Thousand," and wonders where the money comes from to carry it all through. He here sees how much of the riches of the "Upper Ten" go in pleasure, he thinks of the kind of life which can be purchased by the possession of wealth, and, if "The Upper Ten" are not far happier than the toiling multitudes around them, the fault is their own. This is the land of freedom, the money is theirs. they have a right to do what they like with it. The observer understands how they make it good for the maintenance of those who, not having other means of living, must work for it, and that the way the rich spend their money enables their poorer companions to exist; he imagines he here solves a little problem in political or social economy, but still he thinks: what is the life of the busy workers of the busy world, to that of "The Upper Ten," whom he has seen here this day? He gets lost in a sea of thought in making the varied comparison, but he afterwards meditates: have all these whose life seems a perpetual pleasure no troubles or cares? He can but think their lives are cast in pleasant places, for he knows that from London they will go to their country seats, to yachting. to the Continent, all on pleasure, only to return again next season for the same round of gaiety. He fancies that probably the selfishness engendered by their lives might perhaps, be a little loosened by some more thought and care for all around them, or rather for those who are compelled by circumstances to administer to their pleasure by working to produce much which enables them to enjoy the life to which they have been born.



VOL. II. 3 F

### THE SERVICE CLUBS.

#### VI.—THE NEW UNITED SERVICE.



ARK Place, St. James's Street, which was built in 1683, forms an integral part of Club land, both by reason of its historical traditions and the clubs it now contains. The Countess of Orrery was one of the first inhabitants, and at

No. 9, resided Sir William Musgrave, the great print collector, while the building which is the subject of our present notice was for many years the residence of Sir Francis Burdett.

Park Place is situated in two parishes, the north side being in the parish of St. George and the south in St. James's, Westminster; on this latter side is the well-known Pratt's Club, sacred to billiards—kitchen suppers and high-class Bohemianism—a club the most aristocratic in London, and which it takes seven years to get into, notwithstanding the fact that the subscription is only two guineas per annum. On the same side of the way, a little higher up, having a private roadway to the entrance, stands the imposing building which the present proprietor has obtained with certain advantages to enable him hereafter to add to the comforts and convenience of the Club, and which will be known to the rising generation of Officers as the New United Service Club.

The Service Clubs we have hitherto described illustrate in a variety of ways, the need there is for another Naval and Military Club. The majority of them have not only their full number of members, but a large number waiting to get in. Then there are certain rules existing at each club which renders it impossible for all classes of the Services to gain admission. It cannot be too widely known that there are still vacancies in the New United Service Club to complete the number, which is limited to 1800 members.

A candidate for admission to this Club must be proposed and seconded in the usual way, his name is then entered in a book of candidates, which is kept for the purpose, and a copy of the entry placed in the hall, dining room, or other part of the Club, and remains there for not less than fourteen days before election, when the candidate is elected by ballot of the Committee. The entrance fee to the Club is ten guineas. The annual subscription to London members, seven guineas, country members, five guineas, and colonial members, two guineas. It will thus be seen that Officers returning from abroad, have not to wait long to gain admission to this Club.

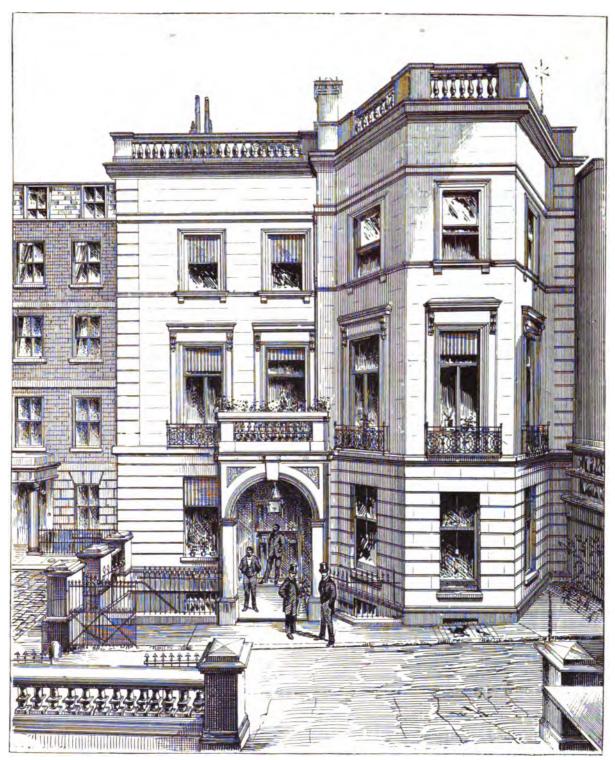
The terms of foundation of the Club are, that it is established to meet the requirements of a first-class club in London for the use of the Army, Navy, Royal Marines, Indian, Colonial and Auxiliary Forces, and Lords Lieutenants and Deputy-Lieutenants of the United Kingdom, and other gentlemen who hold or have held Her Majesty's Commission. At present the Club is strictly proprietary.

It will be noticed from what we have just said that, unlike any of the previously described Service Clubs, all branches of Her Majesty's Services are equally admissible, and now that wars have undergone such marked changes. such non-restriction as to admission which the New United Service Club offers, cannot fail to be productive of most agreeable results. The present army of occupation in Egypt is composed of officers of the Army, Navy, the Indian Forces, Marines and Colonials, in after days what can be more pleasant to contemplate than seeing officers of these several Forces, who have been comrades in arms, assembled under one roof in a Club such as we are now considering. The liberal view taken by the proprietor on this point is one that cannot fail to be appreciated in these days of wars and threatening of wars. The increase in our Navy points out the necessity of another Service Club being established, and now that railways have placed London within easy reach of the chief seaports and dockyards, Naval officers are always glad to run up to the levees, opera, or otherwise for a day or two's trip. The New United Service Club, from its position, enables officers to walk to St. James's Palace, and has excellent bed-room accommodation for the use of members.

The commanding appearance of the Club is well shown in the picture taken from a photograph by the London Stereoscopic Society. On the ground floor there are two excellent smoking rooms and a lavatory. The appearance of the hall, which is large and lofty, is much enhanced by the noble staircase which leads to the dining and coffee rooms. On this floor there is another room which, on giving due notice, can always be engaged for a private dinner party. On the second floor are the billiard and card rooms, and three excellent bed-rooms, and on the third floor there are five more bed-rooms and a bath-room. There is a back staircase for the use of the servants, so that the club is perfectly private. Field-Marshal H.R.H. the Duke of Cambridge is patron of the club, and on the last occasion of his dining there expressed himself much pleased with the general arrangements. The Committee sustained a very severe loss by the death of the Marquis of Londonderry, who was Chairman, and who, by his activeness and the great interest he displayed in the welfare of the club, contributed in a great measure to raise it to its present high position. The present Committee, headed by the Earl of Rosslyn, contains a number of names which are not only representative of the United Services but in many instances historical, and all work together in perfect harmony. The arrangements of the cuisine are excellent and better cooking is not to be found in any club in London. The house dinner is a marvel of cheapness; for half-a-crown you have a dinner composed of, Soup, Fish, Entrée, Joints, Sweets, Cheese, &c., including table money. The wines are proportionately cheap, the result being that,

although the club has fewer members than many others have, the average attendance is higher. The tone of the club is all that could be desired in a society of gentlemen,

popular with the Committee and members, Mr. Adams's presence among them is always welcome; courteous in his bearing, and a good raconteur, he was well described



THE NEW UNITED SERVICE CLUB.

while sociability and good fellowship are its prevailing traits. Mr. W. O'Brien Adams, the Secretary, has identified himself with the Club from its commencement, and takes the greatest possible interest in its welfare. Equally

by a member of the Club who quoted an epigram of Martial's, "Comes jucundus in vid pro vehiculo est."

JAMES C. DICKINSON, Retired Staff-Surgeon.

#### THE GERMAN VOLUNTEER SYSTEM.

BY W. ROLFS.



seems absurd to speak of "volunteers," in a country where every able-bodied man must be a soldier from his seventeenth to his forty-second year. This error springs from applying the same term to two things widely different.

"Volunteers," in the English sense of the word, do not exist in Germany; yet at the beginning of this century the voluntary troops of Lutzow and Schill (that may have



VOLUNTEER OF THE LINE, IN FIELD DRESS.

suggested to Stein and Leharnhorst the idea of general compulsory service) somewhat resembled the English volunteers. Since the re-organisation of the army, the system of these two eminent men has been elaborated in accordance with the demands of the country. Accordingly, it has gradually become so perfect as to be alike practical and highly popular. But when we reflect that this system derives its perfection from the harmony subsisting between its requirements and the wants and condition of Germany,

it is obvious that it would be very unwise to transplant it into other countries, without, at least, undergoing important modifications.

What the voluntary service in the German Army really means, will be seen by a brief glance at the recruiting system of that country.

The German Army recruits itself in three different ways:—

- 1. The ordinary conscript waits till the authorities declare him fit for the service, which seldom happens before his twentieth year. Instead of waiting, however, he can claim to volunteer, either
  - 2. As a volunteer of three years (or four in the cavalry), or,
  - 3. As a volunteer of one year.

The German youth who has gone through the usual course of primary instruction in the "Volkschule," and who has not by a subsequent examination acquired the right to volunteer for one year, belongs either to the first or to the second class; to the latter, if he professes his willingness before his twenty-first year; to the former, if neglecting this opportunity, he waits to be drafted into the regiment selected for him (according to territorial distribution) by the authorities. In a certain sense, then, every German may be a "volunteer" if he think it worth while.

Let us first consider the volunteers of three years. "Every young man," says the Army Bill, "who is liable to military service, has the right to enter the army, provided he is morally and physically qualified, and to choose the regiment in which he wants to serve."

Young men who avail themselves of this right are :-

- 1. Those who enter the army with a view of becoming non-commissioned officers.<sup>1</sup>
- 2. Those young men who desire to make the most of their musical or other talents, and, therefore, wish to enter a regimental band, a military bureau, &c.<sup>2</sup>
- 3. Those recruits, whose parents reside at a garrison-town or want their sons, for some reason or other, to serve in a particular regiment.

If a young man aspires to the position of a non-commissioned officer, it is, of course, to his advantage to enter

- <sup>1</sup> In the German Army non-commissioned officers are, as a rule, precluded from further promotion. Extraordinary merit alone can put the "bâton de maréchal" in their knapsack. Sometimes sergeants, whose service has been long and faithful, are pensioned with the rank of lieutenant.
- <sup>2</sup> Such advertisements as the following may be found in every number of the *Militaer Wochenblatt*,—"The 65th Regiment wants to engage a good regimental *Tailor*. Send in applications, &c.;" or, "Wanted, at once, a *Drummer* by the 1st Battalion of the 30th Regiment," a. z. o.

the army as soon as possible. Young men of this class, therefore form the majority of the three years' volunteers. When such a recruit has gone through the regular drill, the captain of his company, is required to declare him fit for promotion, when he is sent to one of the schools for non-commissioned officers, where he receives theoretical and practical instruction. His rank in the company is not altered by his attendance at this school, and only after longer service is promotion obtained.

The system of volunteering for three years is, however, much more general. The career of a German officer is quite analogous to that of the sub-officer just described. A decided majority of officers begin their service in the army as volunteers, either of three years—which is the rule—or of one year which is the exception. Only a few officers are trained in the cadet-schools, which are not numerous. They are simply high schools of the "Realschule" type, with a military organisation, and are mostly frequented by the sons of officers and of officers' widows, to whom many privileges are accorded. In general, the youth desiring to enter the army completes his education at one of the superior state-schools, and then volunteers as any ordinary recruit,1 of course, with the distinct understanding, that his aim is promotion. He performs the regular drill with his fellow-recruits, which lasts from November till the end of January, lives in the barracks, and (the privilege of wearing the tassel granted to men serving for promotion excepted) is treated in all respects like the privates—a method of training not likely to be approved by the English gentleman, but admirably fitted to make efficient officers. When this training is deemed sufficient—after nine months' service or more—he receives from his captain a certificate of military proficiency, and then becomes a sub-officer. He is styled an "avantageur," 2 i.e., a probationary officer, and is also permitted to wear the silver tassel, which distinguishes him from the ordinary corporal. On his promotion he must spend a year at a military school, and thereafter pass a practical as well as a theoretical examination. He returns to his regiment with the same rank, and only after some months of practical training can he obtain his commission as an officer, when he has been nominated for promotion and duly balloted by the officers of his regiment.

Those volunteers of three years who avail themselves of the permission solely to choose their garrison town generally pass into the reserve without promotion. But as in cavalry regiments volunteering is commonly connected with wealth, and, therefore, with a certain education, non-commissioned officers of the reserve are often chosen from this class.

We now come to "the volunteers of one year," one of

the most national and important institutions in the German Army.

It is strange that it should be so misunderstood—not only by the "intelligent foreigner," who takes a superficial view of everything, but by those who have tried to introduce it into other countries. Indeed, though we have spent many years abroad, we have not yet met with an accurate account of the peculiarly German institution, the Einjahrig Freiwillige. Even a writer so conversant with military affairs as Captain Hozier, falls into the erroneous opinion which widely prevails. Before quoting his words we may remark that no more absurd imitation of the



PRIVATE VOLUNTEER OF THE LINE, IN PARADE DRESS.

German system could perhaps have been invented than that which the French are pleased to call the *Volontariat*  $dun \ An$ .<sup>1</sup>

1 It may be worth while to note such differences as the following: The French volunteer is prohibited from travelling any other class than the third; the German is strongly urged not to take advantage of the cheap third class military tickets, but to travel (as most well-to-do Germans do) second class. The French volunteer wears no badge of distinction; the German is proud of the coloured lace round bis epaulets, which mark him out as, so to speak, the gentleman-soldier. The French volunteer passes his year in the barracks, and mingles during that time with his fellow-soldiers of a lower type; the German is kept in close contact with these just long enough to thoroughly understand life in the barracks. The German volunteer does not pay a definite sum of money to the government, which

<sup>&</sup>lt;sup>1</sup> It may be remarked that the colonel of a regiment can refuse any candidate whose school-certificates do not give him satisfaction.

<sup>&</sup>lt;sup>2</sup> Perhaps the most infelicitous of the many absurd and barbarous terms so commonly used in the German army.

The principles underlying the German system are not only misunderstood in France, but its conditions seem to us entirely wanting in that country, and, therefore, also in its Army. In monarchical Germany subjects are not deemed equal by the Government, which acts upon principles widely differing from those which regulate the French democracy. These principles (which can be traced through the military as well as non-military system of the German Government) may be summed up as follows:—1. The subjects who possess most owe most to the commonwealth, therefore, 2, the authorities avail themselves of all the resources of every subject; and 3, the higher the education of the individual, the more useful he will prove in the service of his country, which adopts in



VOLUNTEER OF THE UHLANS.

practice the maxim—that the right man should always be put in the right place.

How these principles are applied to the volunteer system may be seen from what we have already said; the institution of the one year's volunteers will make it still more apparent. But let us first revert to Captain Hozier:—1

"In both Germany and France 2 it has been found necessary to institute an exceptional system, by which lads richer than the ordinary conscript are allowed, on condition of supplying their own equipment, to compound

equips, lodges, and maintains him. He occupies his own apartments, takes his meals according to his means—in fact, as if he were an independent gentleman, lives apart from his service, and is thus well fitted for his subsequent position as an officer of the reserve.

for the liability to military service through service for one year as volunteers in the ranks."

The statements contained in this extract are utterly erroneous.

Just as non-commissioned officers and officers of the line are obtained from the volunteers of three years, so the one year's service has been inaugurated, solely to train non-commissioned officers and officers of the reserve. The former are professional soldiers, the latter are not; and it is difficult to perceive in what respect their privileges are superior to those who compound for their military liability by service for three years.

The paragraph, which recognises the claim to one year's voluntary service, and which at first sight does not seem to differ from Captain Hozier's statement, runs as follows:—

"Young men of education, who supply their own equipment, board and lodging, and who, before their twenty-first year can give certificates of proficiency, will after one year's service in the line be withdrawn into the reserve."

In Germany, perhaps, more than anywhere else wealth is associated with education. *Privilege* there, accordingly, prevails only in so far as wealth is a privilege, and that, of course, cannot be avoided.

We shall try, however, to prove that the majority of the *Einjahrig Freiwillegen* enjoy even less than a privilege; in other words, they contribute to the state a much more complete compensation than the ordinary conscript of three years.

We shall not enlarge upon the great expense incurred by the one year's volunteer, as that is included in the "privilege of wealth." But though Captain Hozier mentions this as the *only* requirement, it is, indeed, the least important.

Let us consider what constitutes a claim to the one year's service.

In general, German parents of good social position permit their sons to attend the higher schools (which are all day-schools) till they have passed what is called the "Examination of Maturity." This examination, corresponding in difficulty, say, to an examination alike at Sandhurst and Cambridge after a year's study, is a conditio sine qud non for every young German who aspires to elevated station in the official world. Some do this on leaving school, e.g., those youths who enter the Post Office. the Custom-House Office, or the army. Others continue their studies at a technical academy, a university &c All, however, must later on pass the crucial examination or examinations, after several years of professional work. In point of fact, we may remark that after the "examination of maturity" has been passed, the position most easily obtained (though not so easily maintained) is that of an officer in the army: here, too, Captain Hozier makes a great mistake when he says that "the best brains in Germany are driven to enter the army."1

<sup>&</sup>lt;sup>1</sup> Nineteenth Century, 1883, August, p. 219.

<sup>2</sup> Most European states have more or less adopted the German system.

contrary, it is well known in Germany that many a youth, whose decided predilection for bodily labour unfits him for passing the later professional examinations for a surgeon, a lawyer, a teacher, an architect, or an engineer, betakes himself to the army as a harbour of refuge. Practically, then, "the brains" are ignored; but as every German whose object is social status, must at least have passed the "examination of maturity" which implies many years of hard work—there is provided a standard of proficiency which enables the German officer, even when he is not one of the most gifted minds the nation can furnish, to become a well-instructed and cultured man.

Now, it is plain that, if with the same previous education and nine months' actual drill, it is possible to make efficient officers of the line whose subsequent training in tactics, &c., is not required for the officer of the reserve, it should be equally possible to train officers of the reserve by a year's drill and subsequent service in the regiment, especially when it is borne in mind that many youths who pursue their studies after leaving school, are actually superior in point of education to the officers, who indeed finish theirs on entering the army. On the other hand, all that is required from the officer of the reserve who cannot but continue a subaltern officer (at least in the field) is this—that he be a well-educated gentleman and an equally well-drilled soldier.

This is precisely the idea worked out by the volunteer system.

All those young men who, at an average of nineteen and a half, have passed their "examination of maturity," and who will now enter the army, a university, a technical academy, a post office &c., have, of course, obtained the right of serving for 'only one year in the army. This standard is, in fact, much higher than the regulations demand. According to them the youth who frequents a "Gymnasium," or other State school with a similar organisation, obtains his certificate for the one year's voluntary service about three years before the time he would eventually pass his "examination of maturity"—the conditions being 1., that he should not be twenty-one years of age: 2., that his school-certificate should be satisfactory. especially as regards conduct. This certificate, along with an application for the right of volunteering, must be sent to the military authorities of the district before the twentyfirst year, upon receipt of which the permission is granted.

This certificate—always on the condition of the twenty years of age—can, however, be also obtained by special examination; so that youths, who left school before they could obtain the regular certificate (often enough from lack of means), may yet have a chance of acquiring it.

Thus, there are three distinct classes of educated young men who enter the army as volunteers of one year, and from whom sub-officers and all the officers of the reserve are to be selected:—

- 1. Candidates who obtain their certificates by undergoing a special examination.
- 2. Candidates who leave school as soon as they have obtained their certificates.
- 3. Candidates who remain at school till they have passed the "examination of maturity," and who enter the army on leaving school, or later on—the twenty-fourth year of age being the limit prescribed by the law.

Though, in theory, all of them have (and, in particular, had for many years past) the same chance of becoming officers of the reserve, yet, as a matter of fact, only the last class is now taken into account, when the question of promotion arises. They represent in civil life the higher and well-to-do classes of German society, and from them, accordingly, the officers of the reserve are selected. Experience has shown that in Germany the calling of the



SUB-OFFICER OF THE RESERVE (GUARDS) JUST PROMOTED.

majority of individuals who have not passed their "examination of maturity," is hardly compatible with the high standing the German officer holds in society. A state of things such as may be found in democratic Switzerland, where a tobacconist some time or other turns out to be a colonel, cannot take place in Germany. For although the motion of the "standes-ehre" of the German officer has been developed (not without much pressure from high quarters) to what apparently no other class of men in the world can attain to, it is undeniable that the solicitude with which this part of the military system is maintained, is founded upon excellent reasons. If it is possibly exaggerated in Germany, its influence is beneficial, as many a gallant deed in the Franco-German War might prove; and the opposite system, exaggerated as it appears to be, or is likely to become in Republican France, will in the long run, certainly prove less satisfactory.

Now, if only the third class of the before-mentioned

volunteers are trained so as to become officers of the reserve, what becomes of the two others?

Strange to say, it is regarding them that there would be a certain right to speak of "alleviation." They do not spend two or three more years at school, with a hard examination to undergo at the end. They are not called upon to endure all the training which is required from the officer of the reserve for many years after his one year's service as a private. They simply serve one year, at the end of which they pass into the reserve. Their subsequent service with the colours does not last more than a few weeks, nor interfere much with their professional work in civil life. The amount of time and money, however, spent on education, is still far greater than that



OFFICER OF THE RESERVE.

incurred by the ordinary conscript of three years' service, and a calculation based upon economical principles would probably decide the question in favour of the latter. It should be further kept in mind that the youth who, for social reasons, is precluded from the position of an officer, and, in addition, for military reasons, even from that of a non-commissioned officer of the reserve, has a much harder period of service than the volunteer of the third class, his position besides being most unenviable if the total absence of esteem on the part of the common private is duly considered.

For the first six months 1 all the volunteers are drilled in the same way, and the hard life of the recruit soon leads to that feeling of camaraderie which is the main comfort, the ideal feature of military work. This, however, soon changes, when "the buttons" are distributed. "The buttons" form a certain distribution, gained by military proficiency and good conduct.2 They are constantly given to all men who serve for promotion, but do not confer the rank of non-commissioned officers. The volunteers of one year who intend to become officers of the reserve must obtain them after the first six months' drill. Now this distinctive badge, granted often enough to common privates who show competent ability to become afterwards non-commissioned officers of the reserve, is withheld for social reasons from a certain number of private volunteers, a slur severely felt by the unfortunate man exposed to the scorn of the common private. The consequences are, however, more important. His comrades during the first hard months now often become his superiors, because they are being trained for the duties of non-commissioned officers and are frequently employed as such. The word of command, the strict discipline soon sweeps away the soldierly fellow-feeling which had grown up by sharing common hardships, when they were under the control of the drill-sergeant. At the close of the year another sifting takes place. Some of the volunteers, who did not in due time receive "the buttons," now obtain them, because they are deemed fit to become sub-officers of the Out of the number of already "buttoned" candidates intended, as a first step, for the same post, those who socially and otherwise are considered qualified, are called upon to pass the examination as officers. The successful candidates in this examination—which is, of course, exclusively military—are at once made noncommissioned officers of the reserve; the rest are sent to the reserve, either with their buttons and the prospect of being appointed non-commissioned officers after a few weeks' additional drill, or without the buttons and without any further military prospects.

But in spite of the greater expenditure of time and money on the part of the volunteer who does not succeed in becoming an officer of the reserve, and in spite of the very disagreeable life he spends as a soldier for a twelvemonth, some persons will contend that he does enjoy a certain alleviation when compared with the ordinary private, who must remain with the colours for three long years. This seeming injustice shows well the excellency of the system and of the principles on which it rests. It shows that the one alleviation from the heavy burden of general compulsory service falls exactly on those classes of the population which can least bear it, and which most

<sup>&</sup>lt;sup>1</sup> Infantry-volunteers of one year enter the army on April 1st, or October 1st.

<sup>&</sup>lt;sup>2</sup> The position somewhat resembles that of a lance-corporal in the English army.

deserve to get rid of it with as little loss of time and money as possible—the poorer middle classes, the hardworked petty official with much more education than his income justifies, the bourgeois of forsaken provincial towns with scanty opportunities for making money, &c.

Another aspect of the question presents itself in the case of that great number of unsuccessful volunteers, who eventually become clergymen in civil life. Having as much as any other subject to serve their king and country, they do so, as a rule, while students at a university. After having taken holy orders, they are exempted from further military duties. The consequence is, that they cannot be made officers of the reserve, and for the same reason they are very seldom promoted, at the end of the year, even to the rank of non-commissioned officers. No one will venture to say that a gentleman who is required to drill very hard for twelve long months without any prospect of promotion, nay, with the certainty of being lost to the army directly afterward, enjoys a privilege much superior to the labourer or the workman, who are both accustomed to hard work and rough friendships.

Indeed, with regard to the actual amount of time which the future officer of the reserve devotes to his military work with the colours, we shall see that there is hardly any alleviation, especially when it is kept in mind: (1) that a large number of ordinary privates are sent to the reserve after little more than two years' service; and (2) that many are engaged in the occupation which they have learned in civil life, and after a year's service in the front are all but done with drilling.

Instead of enjoying similar privileges, the young man who returns to his occupation in civil life, with the rank of a non-commissioned officer and with the qualification for becoming an officer of the reserve, finds his work year after year interrupted by military drill. First, he is called out for two months' service in the spring following the year of his drill as a private. This special time is chosen, because then the company-drill takes place, during which he must acquire his proficiency as an officer. After a month's drill with the company, he is generally advanced to a rank similar to the English "pay-master," (and for another month serves as such, doing, as a rule, officer's duty. At the end of the second month the captain and the other officers of his company must write out a detailed certificate of his military qualifications. This is transmitted to the regiment, which now proposes him for election to the corps of the officers of the reserve, to which he belongs. After mature consideration of his personal and social position a ballot then determines whether he is to be received among them or not. To prevent unfair blackballing, the reasons for his rejection must be set forth in detail in the report, which now returns to the regiment. The commission, of course, follows, if all goes well. From this period till he is allowed to enter the "landwehr" he is generally called out twice or thrice to serve with the colours, and each time the service continues from six to eight weeks; so that the time actually spent with the colours amounts to nearly two years. The question remains whether it is better to serve consecutively for two or three years and then have almost done with it, or to diffuse the same service over six and even more years.

We have thus shown that every German contributes a fair quota to the military service of his country. If wealth enables some of its subjects to enjoy a more liberal education than others, the state requires so much the more from them as soldiers; and the onerous burden of



"BUTTONED" VOLUNTEER OF THE LINE.

compulsory service is as equally and equitably distributed as possible.

Let us conclude with the following remarks made by Captain Siebert in a paper read two years ago at a military club in Berlin:—

"Since 1870 we Germans have become the teachers of all the European armies. All our neighbours have with terrible zeal imitated or adopted our organisation, our tactics. Two things only will remain, it is hoped, unattainable by others—the elements which go to form our corps of officers, and the discipline, the soldierly spirit of our men."

The latter especially is in no small degree due to the German volunteer system.

<sup>1</sup> A kind of second reserve, which he can enter after six years' service in the reserve, and in which he must remain for five years. If he prefer it however, he may remain in the reserve for these additional five years.

### RECOLLECTIONS OF THE RED CROSS.

(Continued.)

BY MAJOR BURGESS, LATE H.A.C.



HE impressions made upon me, placed in a position to observe all the workings of a large public subscription fund, were somewhat mixed. The money came in, without doubt. But why? Was it from a suddenly awakened realising of the horrors of war? Partly;

thanks to those objectionable intruders, the war correspondents. All honour to them! Russell, Forbes, Pemberton, Robinson, Cameron, Herbert, and their brethren of the pen, citizens who deserve well of their country, who have done more for the soldier, more for the cause of peace and prosperity, than any class of men living. Was it because of the "still, small, voice," that reproached us English with standing by whilst the France that saved us at Inkermann was cruelly punished? Yes, partly. Was it from our national science known to sporting men as "hedging?" I fear, partly. And, let me believe, partly too from a generous impulse, irrespective of self, to open purse strings in aid of human suffering. Still, when all is said and done, we are a business-like people. We are a nation of shopkeepers. We like a quid pro quo. And the higher we go in the social scale the larger quid is, as a rule, liked for the quo. And then there is the flock-ofsheep principle to be regarded. A. is advertised as the donor of £100. B. C. and D. at once send in their £100 a-piece. E. comes down with a £150. F. makes it £200 -and so the game of brag goes merrily on, to the benefit of the cause.

I was once at a musical festival in Gloucester Cathedral, in company with an old Q.C. I observed him much moved during one part of the oratorio, throwing his head from side to side, whilst tears coursed down his face. "What is it?" I asked. "Are you ill?" "No—the music." He could say no more, but only point to the libretto, "All we like sheep have gone astray." The theme ended, his convulsive movements resolved into more controllable laughter, as he gasped out, "The finest bit of descriptive music I ever heard." And to the eloquently descriptive music of the daily feuilletons of the National Aid Committee, the public followed like a flock of sheep.

Colonel Loyd-Lindsay stated that no appeal was made. So says the man with the dog, the money-box, and the placard, "Blind." When we find some £5,000 expended in newspaper advertisements of subscriptions, and, as the

quid pro quo, the columns of the dailies filled with harrowing descriptions of the sufferings of the sick and wounded, it may be fairly concluded that there are more ways than one of making an appeal.

The clergy were specially tiresome to us. What with their very classical but illegible handwriting, their faulty arithmetic, their dictatorial tones, and generally unbusinesslike ways, they gave us no end of trouble. When the "Wig-ram of the flock" gave tongue, they followed in chorus. In the office we were in despair. Grove had gone, and there had come to assist me in his place the Rev. Mr. Pearse, a quietly humorous, sensible, genial aide whom I must always regard with the most kindly reminiscence. The clergy complained that their names were wrongly spelt in the advertisements; that having preached for the cause and procured money they could not satisfy their flocks that the money had been duly remitted. One morning Pearse triumphantly placed before me a huge linen placard showing at the top three or four inches of red cross, and a form of a receipt in letters of an inch

"There," he said, "that will quiet them. They can nail it to the church door." And there was no more trouble with the parsons.

On the other hand there were distinct instances of the admirable charity that cares not to let its left hand know what its right hand doeth. One day about the dinner hour, when I was generally left alone to work, a young man entered, and after asking me a few questions, felt his pockets and produced a shilling, turned it over, and put it back again. Then suddenly detaching his watch-chain he handed it to me saying "I have no money worth giving you; will you take this?" I took it, asked his name, and he replied "Oh, never mind that—say 'Cantab.'" Another time, an old gentleman, in deep mourning, asked for me, said he had lost wife and children, and was breaking up his house; if the household linen would be useful he would send it. His name was not to be published. The linen came, a goodly cart-load, and clean.

Then the soldiers and sailors came to the front. Before H.M.S. Captain turned over and went down with all hands, her crew had sent up a subscription. The 46th Foot set the example of giving a full day's pay of the entire strength of the regiment; Keith Fraser brought the same from the 1st Life Guards; and Loyd-Lindsay followed suit with his old corps, the Scots Fusiliers. It

was not "by order." It was the generous impulse of soldiers to aid soldiers.

The Masons too, from Grand Lodge to the youngest Lewis, sang in chorus:—

"Come let us prepare,
We Masons that are
Met here on this solemn occasion."

But it was not to "drink, laugh and sing," it was rather to give practical emphasis to the Tyler's toast "to all poor and distressed brethren," in the ranks of the contending armies, by a grant of such donation as the funds of the lodges could spare, from £500 to more modest sums. Outside the blue Masons, the Christian Degrees, moved by the "handsome Captain" of the 47th Foot, and by Colonel Shadwell Clerke of the 21st Fusiliers, soldiers and gentlemen to whom masonry owes much, brought us a handsome cheque.

There is one point about the fund which even at this distance of time I think of with honest pride. The total amount paid in salaries and wages of the not inconsiderable staff in St. Martin's Place was for the whole year of work only  $\frac{1}{250}$ th of the sum administered. Charity Organisation Society, and Egyptian War Fund, please copy.

Almost immediately after the declaration of war, Mr. William MacCormac, a Fellow of the Royal College of Surgeons, and consulting surgeon of the Belfast Hospital, started for Paris, hardly knowing what services he could render or even whether his offer of service would be accepted. At first coldly received, he and other English and American surgeons were afterwards welcomed by the express desire of the Emperor Napoleon. After the loss of some valuable time in a discussion as to where he should be employed, he proceeded to Metz under orders to the military hospital there. But having been seen speaking to an American who happened to sit next to him at tabled'hôte, he was next morning summoned before the Provost-Marshal and advised to leave at once. Such was the fear of spies amongst the French, that one dared not engage in the most ordinary conversation with a stranger. Although naturally annoyed at so unlooked-for a termination of his disinterested offer of useful service, MacCormac subsequently had his consolation in hearing that the Provost-Marshal himself had been arrested as a spy by one of his own gensdarmes, and marched a prisoner to the préfecture.

Returning to Paris MacCormac found that his friend, Dr. Marion Sims, had been called by the American residents in Paris to the leadership of an ambulance which they were organising. Whilst discussing ways and means there arrived at Paris Dr. Philip Frank, formerly of the 91st Foot, representing the National Aid Society, and in that capacity bringing money and stores. The French desired the Americans to remain in Paris; the Americans replied that they had united for the purpose

of giving immediate aid where fighting was going on, and they declined to give in. Thereupon the Americans joined forces with the Englishmen, Frank, MacCormac, and Webb, and constituted the Anglo-American Ambulance, with Dr. Marion Sims as chief. To the 50,000 francs brought by Frank the French added 15,000 francs, besides horses, wagons, tents, rations, and all else asked for. The staff comprised eight American and eight English surgeons, and on the 28th August the ambulance left Paris, reaching Sedan on the 30th. Whilst waiting at midnight at the railway station, they saw arrive the Emperor, Marshal MacMahon, and Staff. It must have been a sad sight. There had been a great battle that day at Carignan, described as a victory for the French. The brilliant cortige walked in silence for about a hundred yards to the



SIR WILLIAM MACCORMAC.

gate of the town: the drawbridge was lowered, the cortige passed over, the drawbridge was raised again, and the silence of night only remained. It did not look much like a triumphal entry after a great victory. On the afternoon of 31st August, the Anglo-American Ambulance found itself installed in the Caserne d'Asfeld, on the ramparts of Sedan, already turned into an hospital of some 400 beds. All day long there had been heavy fighting towards Pont-Mangis and Bazeilles, and no sooner was it known that an English hospital was established at the Caserne d'Asfeld, than wounded began to be brought in. Up to six o'clock 130 men were treated, and about that hour news came that some 200 wounded were untended in the village of Balan, about two miles away. At

once Sims, MacCormac, Frank, Blewitt, Wyman, and Hewitt started off. Finding a fine large house, MacCormac took possession of it, arranged some beds on the floor, and improvised an operating table. One villager held a lantern, another a basin and sponge, whilst MacCormac, assisted by Hewitt, performed the necessary amputations. And so passed the night of the 31st August.

Before daylight on the 1st September, a heavy cannonade sounded the réveille, and when the fog lifted one could see that the fight was spreading along the whole position, some six miles long. At either end, Floing and Donchery on the north-west, Bazeilles and Balan on the south-east, the infantry and cavalry were engaged. From about two miles in front of the hospital the Prussian batteries rained shells from ten o'clock in the morning till four in the afternoon upon the French lines in rear of the Anglo-American hospital. From time to time the building itself was struck, and several of its inmates killed. About six



DR. PHILIP FRANK.

o'clock the cannonade ceased. The whole day long the wounded poured in, and towards night some 4,000 demoralised soldiers crowded into the barrack yard for shelter. "I suppose," wrote MacCormac, "that one gets used to this sort of thing, but when one first performs operations under fire, the whistling of projectiles close by does not fail to cause a disagreeable sensation."

Next morning a brilliant sun threw searching light upon the scene: and for a whole week afterwards the dead were being buried. Even up to ten days after the battle, wounded were coming in, and the mortality was great amongst these. Fighting had not recommenced, and at last the doctors heard that 100,000 men, 400 pieces of cannon, and 70 mitrailleuses had capitulated,

and that the Emperor himself was a prisoner. In Sedan was indescribable confusion, some men cooking horseflesh, others eating it raw. Carcases of horses with no flesh remaining were all about, but no such thing as bread was to be found anywhere.

On the evening of the 2nd of September the doctors at the Caserne d'Asfeld learned to their great joy that Frank was safe and sound. They had seen Balan in flames, and the worst was to be feared for their colleague. Who that knows the man need wonder at their joy? "A woman in gentleness, and a man in strength and firmness, his presence is sunshine in every room he enters." Such was the opinion of Henry Brackenbury, the captain in 1870, the youngest general of to-day, who promises to be to-morrow one of our "only" generals.

On the 31st August Frank and Blewitt had already 100 wounded, and had just lain down to rest before daylight when there commenced the Réveille des Artilleurs, which opened the battle of Sedan. The day was passed in the alternate occupation and evacuation of Balan by French and Bavarians. Whichever was outside the village kept up a concentrated fire on those inside, so that for the entire day Frank was in the centre of a converging fire. Blewitt had gone to the Convent Ambulance and could not return. Frank was alone. From early morning until late at night he was unceasingly occupied in extracting bullets and pieces of shell, staunching hæmorrhage, dressing wounds, improvising splints in cases of fracture, amputating shattered limbs, soothing with his one hypodermic syringe, giving such comfort and support as he could to the dying. "Words of sympathy and encouragement had, alas! in many cases to make up for the deficient help I was able to afford." All this time a rain of bullets was being poured through the hospital, and now and again he had to lie flat on the floor to escape the storm of lead and iron. The wounded men being all on the floor, his labour was materially increased by the necessity of a constantly stooping position. Thankful for having escaped the dangers of the day, he lay down, half dead with fatigue, at 3 A.M., after satisfying himself that all his patients were in comparative comfort. At six o'clock he was up again to attend to them. At eight there came a Bavarian surgeon to help. At noon Blewitt returned, and two old villagers and their wives were found to undertake the night watch.

Here was a grand day's work! And from what motive? Money? No. Kudos? No. Simply from the desire to afford such comfort to his fellow men in suffering as his experience and enthusiasm in the healing profession might enable him to give.

There were some pathetic incidents connected with the war which came to my knowledge. I do not understand how public opinion gets formed in this country. Lord Palmerston described public opinion as "a man in a white hat on the top of an omnibus." Anyhow we have been accustomed to regard the Frenchman as a heartless, selfish

brute. I cannot understand why. What is the dying French soldier's expiring cry? Vive la France? La Gloire? Not a bit of it; a gentle sigh—Ohé, ma Mére! At Balan a small packet was brought to one of our surgeons, a pocket book, the Cross of the Légion d'Honneur, and a note in pencil; a bullet had gone through the book and the note, which ran as follows: "Sédan, 1 Sept.: Au milieu de la lataille, entouré par les balles, je t'adresse mes adieux. Les lalles et les boulets qui m'épargnent depuis quatre heures ne me ménageront pas plus longtemps. Adieu! ma femme bien aimée. J'espère qu'une âme charitable te fera parvenir cet adieu. Je me suis comporté bravement, et je meurs pour n'avoir pas voulu abandonner nos blessés. Adieu! Un laiser."

It is said that on the 7th August, the Empress wrote to the Emperor, "I am persuaded that we shall lead back hit on the 1st September, and who had remained unnoticed until the 5th in the ditch where he had fallen, underwent amputation at the hands of Frank and MacCormac. He asked for a cigar, and smoked whilst preparations were being made. The amputation under chloroform having been successfully performed, he coolly resumed his cigar. Unhappily the four days of cold and starvation told upon him eventually, and on the fifth day after the operation the brave fellow succumbed to tetanus.

And now we will take leave of the Ambulance in which England and America worked cordially together to alleviate the miseries of French and Germans. Dr. Marion Sims has gone to his rest, loved and honoured on either side of the Atlantic. Blewitt is a hard working doctor in the City of London. Frank, and the Lady Agnes his wife, will always remain in the kindest recollection of all who



THE DYING FRENCH OFFICER.

the Prussians to the frontier, the sword in their loins. Courage, then! With energy we command the situation." But courage and energy were no match for cool organisation. Every morning at six o'clock our doctors in the Asfeld barracks heard enchanting military music, to the sound of which the unfortunate French prisoners, many of them sick, wounded, and half dead, were marched off to Germany. The badly wounded who came under Frank's hands were more fortunate. On the 5th of September he took possession of the Château of Montvillet close to what had been Bazeilles, and installed his lucky patients. There in the fine weather they sauntered about under the orange trees, or enjoyed boating on the ornamental water. The owner of the property was the Comte de Fiennes, probably descended from a common ancestor with the Lords Save and Sele. Here a young chasseur à pied named Lyon, were connected with the English Red Cross work of 1870 and 1871. Sir William MacCormac is still amongst us, honoured as a man whose sound head, staunch heart, and sure hand have justly won for him a high position in the noblest of the professions.

The Intelligence Department of our army, which, according to recent accounts from the Soudan, does not seem perfect, may take a lesson from German organisation.

Having entered a French town the Prussian commanding officer sends for the mayor: this gentleman being merely a civil official does not consider it as any part of his proper functions to come into contact with the military, and judiciously disappears. The adjoint is caught and pleads that he is only adjoint. Offered the alternative of being maire, or being shot without benefit of clergy, he elects to be maire. "Now, M. le Maire, I want so many thousand

francs, rations, &c." "Impossible. We are ruined. Not a tenth part of this could be collected." "Allow me to assist you," says the soldier. "Here is a list of your good citizens who can, and I feel sure will, contribute." M. le



Dr. Marion Sims.

Maire glances at the document and finds that the financial status of himself and his fellow townsmen are accurately known to the enemy, whose "requisitions" are forthwith complied with.

Next the tax collector is summoned to audience. "I see by your books that — thousand francs are outstanding and uncollected, these must be handed to me within twenty-four hours, or your tenure of office and of existence will then terminate."

Next, the station master is sent for. "What money have you?" "None. I sent it away by the last train." "But your books show so much not written off. You are too good a man of business to send away money without writing it off. Hand it to me at once."

Then the post-office is visited, letters opened, drafts to bearer presented for payment, and drafts to order are signed "pp."

On the other hand, as a specimen of the French Intelligence Department, in the waiting rooms of stations on the line from Bâle to Neuchatel were placarded notices dated 14th February, 1871, to the effect that the 29th Regiment de marche Mobile 15th Corps, 2nd Armée, and the 77th Regiment, 18th Corps, 2nd Armée, were lost. Any one finding the same was requested to communicate with &c., &c.

The English Society desired to place in the field a complete ambulance, and naturally turned to the War Office for information. No unit was recorded there which might be taken as a guide, consequently one had to be improvised. There were surgeons, and wagons, and harness, and stores, but no organisation. One was invented, and a costly, unwieldy, and unsatisfactory affair it was. The chief care in the constructing of our military ambulance wagons seemed to be, not the comfort of the wounded, but the divisibility and convenient stowage of the wagons for shipment. The Society purchased the material from the War Office, which also placed at our disposal the services of twelve army medical officers, a commissariat officer, one sergeant-major (Ward), five non-commissioned officers and twenty-one privates of the Army Hospital Corps. On the 13th October, 1870, the corps known as the "Woolwich Ambulance," embarked at Woolwich for Havre. Its matériel comprised eight ambulance and twelve general service wagons, twenty sets of harness, and saddles and bridles for fourteen of the personnel. It took twelve hours to embark, and four and-a-half hours to disembark. Lord Bury and a London vet. went over to Havre to buy the horses, and it having been decided to employ French drivers, it seems almost unnecessary to detail the trouble, annoyance and complications which naturally arose in consequence. Probably the only thing that kept the drivers under any sort of control was the revolver of Mr John Smith Young, Commissariat Officer. Eventually Dr. Manley, V.C., who succeeded to the command of the Woolwich Ambulance on the retirement of Deputy Inspector General Dr. Guy, found that he could only work by attaching his corps to the



MISS NEGLIGEN.

German army—thus at once demonstrating a weak point in the absolute neutrality of the Red Cross principle, and in the avowed impartiality of the English Society. The cost of maintaining the ambulance was out of all proportion to the results, notwithstanding the facts that at the close of the war the War Office bought back the matériel, and that the horses, utterly broken down as horses, were sold at Paris for food for what they had cost us as sound serviceable animals. It would be difficult to speak in too high terms of the services of Drs. Manley, R.A., Porter (97th), Wiles (Rifle Brigade), Sandford Moore (4th Dragoon Guards), and of the value to the War Office, and to the Red Cross at large, of the experiences gained by this expedition. Mr. Young was the first Englishman who brought food to starving Paris, not from the Lord Mayor's Committee, but from the National (Red Cross) Aid Society.

I believe that Major de Havilland with his one cart, backed solely by his own purse and the contributions of a few friends, showed far better results proportionately than our great "Woolwich Ambulance." out at one of the advanced posts near Bezons. The fierce wind and low temperature chilled one to the marrow. Young at once got out a wagon and started with some of his men, followed by the Baron in his carriage. Crossing the pontoon bridge at Le Pecq, they took the road through Vesinet to Châton, where they obtained from the Prussian Commandant a safe conduct along the bank of the Seine to Carrières St. Denis, and an escort of ten men to reply to possible French skirmishers. They could hear the French talking, but protected by a thick fog they arrived safely at the bridge at Bezons. Here the Prussian picket said that the wounded man must be on one of the islands in the Seine. The party retraced their steps to the Havre railway bridge, and under one of its arches, then utilised as a stable for a cavalry picket, Young and Zensen held counsel. It being evident that in order to rescue the



LANDING THE WOUNDED SOLDIER.

Their work ended, the surgeons came home, and the War Office, with that magnanimity which characterises our Government departments, promptly cut their pay for the period of their absence. I had the pleasure of fighting and beating the War Office on the point, and Manley at once gratefully and gracefully placed the whole of his official pay at the disposal of the Society of St. John to form a nucleus for carrying out the scheme, originated by me as almoner, which is now widely known as the "St. John's Ambulance Association."

The personal pluck of Englishmen is always a redeeming feature of our official failures, and in the history of the "Woolwich Ambulance" may be found a case in point.

On the 10th December, 1870, Mr. John Smith Young, left at St. Germain in charge of the last wagons of the Ambulance, was informed by Baron Zensen, one of the King's chamberlains, that a wounded Prussian was lying

man one must run the gauntlet of the French sharp-shooters, the Baron declined to expose himself and his escort to the risk. Young at once decided to go without the Germans, and taking with him one man of the Army Hospital Corps, a boat was found in which the two Englishmen pushed across the stream. Every word and movement of the French patrol was plainly audible. Landing on the island they searched about and found the man still alive though suffering torture from the intense cold and the shot received through his thigh twenty hours ago. They carried him to the boat, ferried him over, gave him food and stimulants, laid him on a mattress in the wagon. At one o'clock in the morning they reached St. Germain, carried him up to the Prussian hospital, and retired to well-earned repose.

Mr. John Smith Young is now the Commissioner of the Red Cross Society attached to the Head Quarter Staff of our army in Egypt. Of his usefulness to the War Office, seeing that his experiences gained in times of peace are monopolised by the Society in time of war, there may be doubts; but of his gallantry as a man and of his value to the Red Cross there can be no question. I trust that he may not fall between two stools, neither of which is very reliable.

There is a cruel story of this Franco-Prussian War, which, if not adorning a tale, at least points a moral. A Prussian officer and party of men arrived at a certain French village. The officer having satisfied himself as to the name of the village, inquired of the inhabitants whether a certain Marquise de —— still lived there, and which was her house. Having been shown the house, he entered it with his men. He asked for madame, and stormed and swore at her non-appearance. He sent for the butler, ordered dinner, spat on the carpet, smashed mirrors, vases, clocks, chairs, &c. When dinner was served he abused the windows until better was brought. He treated the servants with the utmost insolence, and,

the orgie over, again demanded to see the lady. The servant said she was dreadfully frightened, ill, and in bed. "Where?" "In that room." "That is precisely where I intend to sleep." The poor old lady turned out, the officer turned in, boots and all. After a while he arose, smashed more furniture, rang the bell, and on the servant appearing again insisted on seeing the Marquise at once. Pale and fainting and supported by her maids she received him at the door of the room where she had sought shelter. Suddenly resuming the outward manner of a gentleman, the Prussian captain removed his helmet with a courteous bow and asked "Madame la Marquise, was your husband captain in the ---- Hussars when France invaded Prussia?" "Yes." "Then I have accomplished a purpose and fulfilled a vow. He came to the house of my grandmother, whose father had fallen at Jena. As a boy I heard what he did there, and I have treasured it in my soul. I know the disgrace and ruin he brought on our name. Now I have kept my vow, good night, Madame la Marquise. I do not pass a night under your roof. I leave you and your household to my men."



### NAVAL AND MILITARY NOTES AND QUERIES.

THE following quaint points occur in a General Order issued to our army in 1755:—

"Whoever shall throw away his arms in time of action, whether Officer, Non-commissioned Officer or Soldier, unless it appears that they are so damaged as to be useless, either under pretence of taking up others of a better sort, or for any cause whatever, must expect to be tried by a General Court-Martial for the crime.

"The Battalion is not to halloo or to cry out upon any account whatever, although the rest of the troops should do it, till they are ordered to charge their bayonets. In that case, and when they are upon the point of rushing upon the enemy, the battalion may give a warlike shout and rush in.

"Before the Battle begins, and while the Battalion is marching towards the Enemy, the Officer commanding is to be at the head of his men, and to be continually looking back to see that his men are in order and following him up."

As an inducement to RECRUITING in 1768, the following Royal Proclamation was issued:—

"To all aspiring heroes bold, who have spirits above slavery and trade, and inclinations to become gentlemen by bearing arms in His Majesty's —— regiment, commanded by the magnanimous —— let them repair to the drum-head (tow, row, dow), where each gentleman volunteer shall be kindly and honourably entertained, and enter into present pay and good quarters; besides which, gentlemen, for your further and better encouragement you shall receive one guinea advance; a crown to drink His Majesty King George's health; and when you come to join your respective regiment, shall have new hats, caps, arms, cloaths, and accourrements, and everything that is necessary and fitting to compleat a gentleman soldier.

"God save their majesties, and success to their arms.

"Huzza!! Huzza!!!"

#### AN AFGHAN MOUNTAIN BATTERY.

BY LIEUT. W. J. HONNER, ROYAL ARTILLERY.



MEER ABDUL RAHMAN KHAN of

Afghanistan was escorted from Kabul to the Rawal Pindi conference of 1885 by a small body of infantry, cavalry, and artillery. The latter, if not the most efficient, was certainly the most

interesting and unique; moreover, it is the most sacred arm in that land of stones and warriors.

This unit which accompanied His Highness the Ameer, was a battery of six screw or jointed guns, mounted for transport on yāboos or stout cobs.

A huge and massive Afghan sentry in company with a Martini Henry sword-bayonet caused one to pause before entering his gun park. But fierce and savage as he looked, he was kind, and sent word immediately to the commandant, who appeared clothed in a bright green frock coat, embroidered with broad and neatly-made gold lace.

The commandant, a young and handsome man of fine physique, proved himself to be even kinder than the savage sentry, and was only too happy to initiate the ignorant into the mysteries of this wonderful unit of artillery.

A minute inspection of the battery commenced with the guns, two of which differed from the other four by the muzzle piece screwing into the breech piece just in front of the trunnions, instead of the breech piece being turned down to receive the muzzle piece. One gunner screwed up the gun by hand.

Muzzle Piece.—The gun was neither a seven-pounder 200 pounds gun, nor a seven-pounder 400 pounds jointed, but a curious cross between the two. The system of rifling might be called the French modified (very much modified by the Afghans), now in use with our sixteen-pounders and nine-pounders R.M.L. field pieces. But the weary monotony of our system was greatly enlivened by the lower groove being twice the size of the upper right, and three times that of the upper left groove. Iron was the metal used, imported from Russia; Hindu the workmen, imported from India. The dimensions were as follows:—

Length	(total)							6 feet.
Calibre								2 inches.
Grooves								3 "
Twist of	riflin	or (	'nn	ifor	m	?)		1 in 20

The fittings were:-

Sights.—One tangent sight of iron, semicircular in section, marked in Persian numerals, graduated in yards Vol. II.

up to 3,000. One fore sight very small and forged to the gun.

Vent.—No copper bush.

Elevating Screw.—A rough attempt at the well-known "Whitworth pattern," used with our nine-pounder R.M.L. field guns.

The ammunition was neatly packed in boxes, which fitted to pack-saddles similar to our own mountain battery saddles.

The Shell.—A common shell of very small capacity, three and a half calibres long, fitted with nine studs, three in each row, covered with a tin cap in lieu of a plug in each row.

Cartridge.—Long and thin, made of weak canvas—the powder oozing through.

Fuze.—A time fuze marked in Persian numerals, graduated to quarter seconds. The length of fuze was given by sawing off the portion not required. The colouring and arrangement of head of the fuze appeared to be identical with ours.

The Carriage was very similar to our seven-pounder 200 pounds earriage, but far lighter. I doubt if it would stand the shock of discharge.

Wheels, axle, and carriage were carried on one horse.

The Camp was neatly laid out after the manner of our own batteries in India. Each gun had a separate tent pitched in rear of the gun park for its ammunition and harness

The Horses were in fair condition, but they were a poor and underbred lot.

The Gunners were a fine body of men, and many of them appeared well informed in their own particular line. Their dress was a decided success, somewhat similar to our own mountain battery dress, the cap being particularly striking—a dark blue band tipped with a red cap identical in shape and material to an ordinary foot-ball or yachtsman's cap. They used English terms freely—the words commandant, lieutenant, captain, magazine, fuze, cartouche, being frequently borrowed.

A harness parade was going on, and though their standard of cleanliness is certainly below our idea of par, everything appeared to be in good working order.

On the whole this battery did great credit to the Afghan army, and showed one thing at least—good material to commence with.

KOHAT, PANJAB, 14th April, 1885.

# THE INTERNATIONAL INVENTIONS EXHIBITION.

GROUP XXV., STAND No. 1918.—THE BLAKENEY PATENT PAD-EQUIPMENT.



THE Pad is the means of carrying the kit-bag, extra rounds, entrencher, blanket, waterproof sheet, mess-tin, or great coat, in certain orders of march. It is the foundation on which I build up my kit.

The Kit-Bag contains the dispensable part of a soldier's kit, viz.:—Extra pair of boots, extra pair of trousers and socks. It is marked with the soldier's accourrement number, company, and battalion, on the outside, and inside with the size-numbers of his boots and trousers

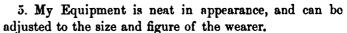
to facilitate the replacing of lost articles. The hold-all should be carried in the kit-bag, but knife, fork and spoon should be sheathed in the knife-holder and placed in the haversack.

Great Coat to be folded soft 15 in. by 7 in. No attempt should be made to compress it into a hard mass. Folded in this manner it can be carried either on the shoulder or on the pad. The coat strap of the coat yoke should always be attached to the mess-tin loop.

Cape should be folded the width of the pad when carried under flap of same, and in a neat little roll or fold when placed in the coat yoke. The waterproof sheet can also be carried in the coat yoke if necessary.

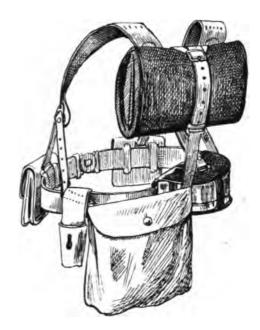
Mess-Tin.—The cover is so arranged that the canteen can be extracted without unbuckling any straps or dismantling the kit. The canteen strap should therefore not be buckled up too tight.

Water Bottle.—This is either an imperial pint glass bottle, or else a soda water bottle protected in a suitable manner. The protecting medium is so arranged that skilled labour is not needed in the renewal of a broken bottle, should this happen. The advantage of glass is, that hidden dirt can be readily detected, and the inside thoroughly cleaned.



- 6. The new Valise Equipment is based on the equipoise principle, and this, I think, is a mistake, for a soldier cannot stop in the heat of action to re-adjust the straps that support the pouches, and it stands to reason that as the rounds diminish in number, so will the counterweight in front decrease, the result being, that the weight of the valise is counteracted by the empty pouches and waistbelt only, and the pressure consequently upwards into the pit of the stomach.
- 7. This is not the case with my Equipment, for the braces are provided with breast-angles, which conduct the straps supporting the value at the proper angle round the chest and under the arms, thus reducing the need for





The General Advantages of my Equipment are as follows:

- 1. The entire kit is so arranged that the kit-bag can be either carried or discarded, and a blanket, waterproof sheet, and extra ammunition substituted for it. Forty of these extra rounds can be handled without taking off the pack.
- 2. The discarded part is contained in a kit-bag, which can be readily resumed without confusion or loss of time, when necessary.
- 3. Proper provision is made for the carriage of all that is absolutely necessary.
- 4. The braces are so arranged that their component parts cannot be lost.

counterpoise to a minimum. In the case of the Valise Equipment, this angle has to be formed by attaching the pouch straps to the pouches, thereby dragging up the waistbelt when a counterweight is not available. In the case of my Equipment this angle is already formed by mechanical means, and the pouch suspenders perform their proper duty, viz., that of relieving and steadying the weight of ammunition in the pouches. If a weight is attached to a strap, whether it be continuous or joined in the middle by means of a ring, it becomes a straightline, or the nearest approach to it, and the braces then take the most direct line to the valise, at the expense of that part of the body in front of the arm-pits, and this produces "cut." The object of my system is to relieve

this iocal pressure on the junction of the arm and the body, and the braces are set at an angle of about 75°. The adjustment of a kit is only perfect when the braces sit properly, independent of counterweight. It is easy to counterbalance and thus produce a result, but is this counterweight a constant factor? Peace requirements have to be taken into consideration, and men do not always have a sufficiency of ammunition to carry out the equipose principle.

- 8. Distribution of weights is a matter of vital importance. The "New Equipment" has its weights concentrated on the back, and a large amount of ammunition in the two front pouches. The reserve rounds are carried inside the valise, and to get at the valise has to be taken off. My weights are distributable, and forty of the expense rounds can be carried on the pad in such a manner that it is not necessary to remove the pack. A greater quantity can be placed in the pad pocket or in the front pouches.
- 9. The carrying capacity of the "New Equipment" is based on the maximum wants of the man, and the valise made accordingly. My system begins with the minimum, or fighting requirements of the soldier as in Light Order, and with power of building the kit up to the maximum, when necessary, as in Marching Order.
- 10. The mess-tin can be taken out of its cover without dismantling the kit in any way, and the cape donned on the line of march without necessitating a halt.
- 11. My Equipment is provided with a light waterproof sheet, weighing 2 lbs.
- 12. The three Orders of March meet every requirement as regards peace and war time. They are: Marching, Detached, and Light Order.

Marching Order.—Kit bag (on the pad) containing one pair of boots, one pair of trousers, one pair of socks, and hold-all. In the pad pocket one shirt, one pair of socks, towel, comb, and piece of soap. Great coat on the shoulders in the coat yoke. Cape under flap of pad, held by the flap-straps only. Arms, haversack, and waterbottle. This order is merely for the purpose of marching to a base of operations, change of quarters, or a periodical parade for the examination of a soldier's complete kit.

Detached Order.—Kit-bag removed and left with the waggons, giving place to blanket, waterproof sheet, extra rounds, and entrencher. Great coat on the shoulders as in Marching Order, and cape ditto. This order is suitable when a force detaches itself from its waggons, or transport breaks down.

Light Order.—This is the soldier's proper Fighting and Marching Order. It is as follows:—Kit-bags removed and left with the waggons, where they can be overhauled from time to time to make good deficiencies, extra rounds in the pad, together with shirt, towel, comb, and pair of socks in pad pocket. Great coat under flap of pad, cape in the coat yoke, and waterproof sheet.

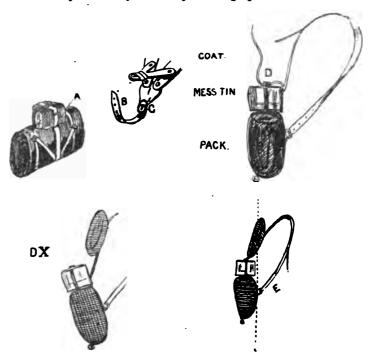
Without Pad.—The kit can be stowed in the water-

proof sheet and folded round great coat and mess-tin on the waistbelt by passing same through between the cover and mess-tin.

It is obvious from the foregoing that Light Order is admirably suited for working in hot climates when the great coat should be carried in such a way as to produce as little local perspiration as possible. It will also be noticed that my braces swivel from two points on a broad base between the shoulder blades, and not from a point or apex. This does away with any tendency to nip a man's shoulders where they join the neck. The main strain follows the line of the spine, and the armhole area is as large as possible. The distributed weights do not adhere to the back too closely, and air can circulate freely, thus obviating undue perspiration.

My system obviates confusion on service, and insures comfort and efficiency under all circumstances.

Adjustment of Blakeney Pad Equipment.



Attach coat strap B to loop A by means of double buckle c, and adjust it so that the top bar of the double buckle is level with top of mess-tin cover. Pass the mess-tin strap through this top bar with the coat strap.

The coat strap then to be passed through the mess-tin loop D before being buckled up. This is the Top Centre Suspension, and without it the Pack would topple outwards, as shown in Figure D X. On no account should this be omitted, as it not only suspends the weight properly, but also connects great coat with pack, and keeps the burden steady. It is best to fit the great coat, in heavy marching order, when a man has his pack on. As a rule, men do not make sufficient allowance for the spread of the straps and buckle up the coat yoke as tightly as they can,

quite forgetting that they lose the benefit of the broad base of the junction of the braces.

The side straps E should never be drawn too tight, as this exercises too much compression, and would result in



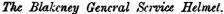
forcing the mess-tin away from the body, and applying undue pressure on the wearer's breasts. The weight should hang from the shoulders, so as to allow the same to take its own bearings. The length depends on a man's figure.

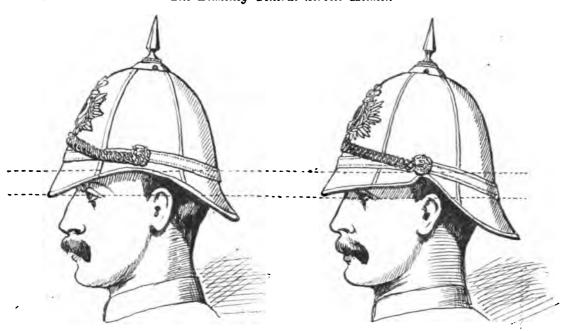
In Light Order the pack can be steadied by passing the waist belt OVER the side straps. This might also be done in Marching Order, but is hardly necessary, as the great coat steadies the load.

The top of the mess-tin should never be so adjusted (by means of the coat strap) as to rub against wearer's back, for this generates heat.

Should it be unnecessary to carry the mess-tin on Guard Mounting, &c., the mess-tin "attachment" F should be buckled up, and the end of the strap stowed under the loops.

The watter bottle is hooked to the pad on the right side, or to the waist belt, for the purpose of taking the weight off the chest.





SERVICE HELMET.

BLAKENEY HELMET.

THE object of this helmet is:-

1st. To give protection to the temples. It should be borne in mind that troops always march in India in the early morning, when the sun is low and not when it is over head. The service helmet has a pointed peak in front which prevents the helmet being brought down low enough to cover over the sides of the head.

2ndly. To improve the appearance of the British soldier's head-dress.

Grey has been chosen because it is both cool to the head and invisible to the enemy.

3rdly. To reduce the cost of the head-dress. The puggaree used with this head-dress is made in strips or flaps, where it hangs down over the back of the neck. This protects the neck and permits of air passing through.

W. BLAKENEY, Major, 3rd Batt. Highland Light Infantry.

### MILITARY MAGAZINE RIFLES.

GROUP XXV., STAND No. 1900.—THE BURTON DETACHABLE MAGAZINE RIFLE, OR UNDER BARREL MAGAZINE RIFLE.

(Both can be Used in the same Arm.)



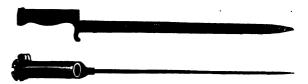
LONG STOCKED BURTON MAGAZINE RIFLE-MUSKET, TO CONTAIN TEN CARTRIDGES.



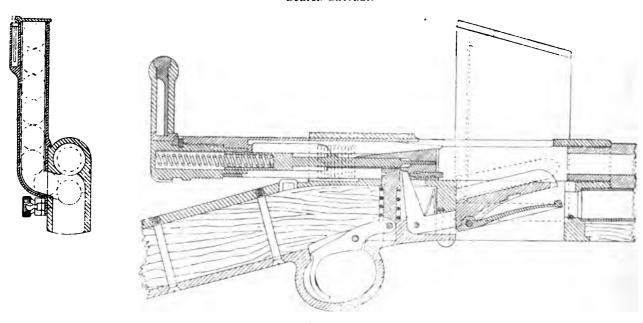
SHORT STOCKED BURTON MAGAZINE RIFLE-CARBINF, TO CONTAIN TEN CARTRIDGES.



SHORT STOCKED BURTON MAGAZINE RIFLE-CARBINE, TO CONTAIN SIX CARTRIDGES.



BURTON BAYONET.



SECTION.

This arm is almost identical with the Burton underneath-barrel magazine-gun, described in the August number of this magazine, but has in addition "the hopper," a form of magazine which feeds by the gravitation of the cartridges. In the rifle now shown Mr. Burton has made some improvements upon his previous arms which do not affect the general principle or working of the bolt action, yet conduce to its security under rapid firing and to the arm's general reliability.

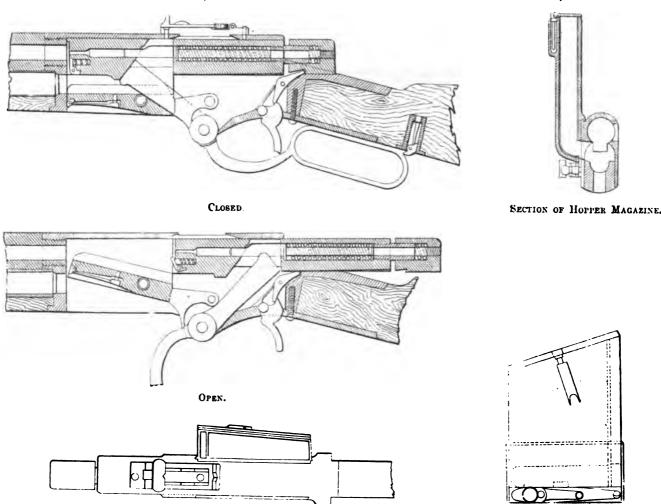
This gun may have two magazines, the hopper, shown

and another in the stock fore-end under the barrel. Both magazines may be loaded and held in reserve by means of a cut off. The cartridges in the hopper lie side by side, and feed down automatically from the hopper though an opening in the side of the receiver, and on to the carrier by gravitation, when this carrier lifts them ready to receive the bolt push. The carrier cuts off the supply feed until the cartridge is pushed into the barrel. The carrier is again lowered, when another cartridge immediately drops upon it through the side opening. The magazine under the barrel is similar to that of the arm

described in our August number. The arm may be used as a single breech-loader.

The hopper magazine, or the magazine under the barrel, are held in reserve for sudden emergencies, or when one magazine is exhausted the other may be used as a reserve for naval warfare only, and the weight of the arm with both magazines filled cannot be objected to, the rifle not having to be carried long distances on the march, but used chiefly in the tops. Such an arm affords sailors and marines peculiar advantages in defending their ship against boarding parties, or when making boat attacks.

THE BURTON UNDER-LEVER BOLT RIFLE, WITH MAGAZINE EITHER IN STOCK FORE-END OR IN HOPPER, OR WITH BOTH.



This improvement relates to the support for the bolt which closes the breech. The bolt works backward and forward in the receiver and receives its motion from an arm of a lever pivoted in the receiver, and the bolt is supported against the backward force of the discharged cartridge by the arm of the lever. The lever itself is supported by a strong pin in the receiver upon which it works; the front end of the lever is forked so as to straddle the firing-pin, thus enabling the firing-pin to be in a direct line in the

TOP VIEW OF BARREL WITH HOPPER ATTACHED.

centre of the bolt. The firing-pin has a flat formed on the small end to avoid weakening the lever and to allow the latter to straddle it in operating the bolt. The bolt is made to operate the lever arm of the carrier in the manner set forth in former patents; the carrier is cut away to allow the arm of the lever to lower into position to support the bolt. The carrier is pivoted in the receiver and its upper arm works by the side of the arm of the lever for operating the bolt. The opening in the receiver is made

SIDE VIEW OF HOPPER MAGAZINE.

on the left side for the entrance of the cartridge and on the right side for ejecting the spent cartridge. The object of this is to leave a support for the bolt on the top, a mortice is made up through the bolt to allow of the arm of the lever to enter and operate the bolt, and the bolt is cut away for the arm of the carrier to work therein in operating the carrier. The extractor is placed in the side of the bolt in order to eject the cartridge through the side opening of the receiver.

The ejector is placed opposite the extractor in the bolt, or it may be placed in the receiver, or the firing-pin may be used to eject the cartridge by the pressure of the hellical spring used for firing the cartridge. The firing-pin extends through the centre of the bolt and the hellical spring is placed upon the rear end of the firing-pin, an inside nut in the rear end of the bolt secures them in place and serves as a support for the hellical spring, the spring acts against a collar on the firing-pin to propel the latter forward, a hole through the stop nut admits the rear end of the firing pin to pass through, a collar nut is put on firing-pin which engages the sear, when the bolt is closed in the receiver holding back the firing pin, and compressing the hellical spring.

The sear is pivoted in the receiver, and the trigger and sear spring are pivoted to the trigger plate, the trigger plate is secured by screws to the receiver, the trigger acting on the sear releases the firing-pin, which is propelled forward by the hellical spring against the cap to fire the charge.

The magazines previously described are used in the present invention, and the hopper is made detachable at will by means of a stop acted on by a lifter, and the arm is provided with a safety-stop to enable it to be carried without danger when loaded.

This under lever bolt rifle with magazine loaded, can fire ten shots in six seconds. Mr. Burton, however, has not been satisfied with even this improvement upon his former rifles. He is now making still more important alterations with great advantage to the arm, particularly with reference to quickness of loading, certainty of extraction, and a complete lock of the bolt, coupled with even greater simplicity of construction. His latest rifles will be placed before the War Office Magazine Rifle Committee for experiment.

The Winchester and Spencer magazine rifles having been found in the American Civil War to be deficient in certain requisites for a soldier's arm, Mr. Burton, amongst other American inventors, submitted his first rifle to the American Magazine Gun Board. His arm was the first produced that would carry heavy charges and answer most of the necessary requirements for a good magazine rifle. At the conclusion of the experiments of the American Board its members appended to this report the following:—

#### VALUE OF MAGAZINE-ARMS.

Resolved,

"That, in the opinion of the Board, the adoption of magazine-guns for the military service, by all nations, is only a question of time; that whenever an arm shall be devised which shall be as effective as a single breech-loader, as the best of the existing single breech-loading arms, and at the same time shall possess a safe and easily manipulated magazine, every consideration of public policy will require its adoption."

MERITS OF WARD-BURTON MAGAZINE-ARM AND CARTRIDGE
—RECOMMENDATION OF WARD-BURTON MAGAZINE-ARM.

Resolved further,

"That the experiments before the Board with the magazine-carbine, made upon the Ward-Burton system at the Springfield Armory, have so impressed the Board with the merits of this gun, that they consider it as more nearly fulfilling the conditions above specified than any other magazine-gun tried by them or of which they have any knowledge. It recommends that a number of magazine-muskets be made on this plan for further trial in the field."

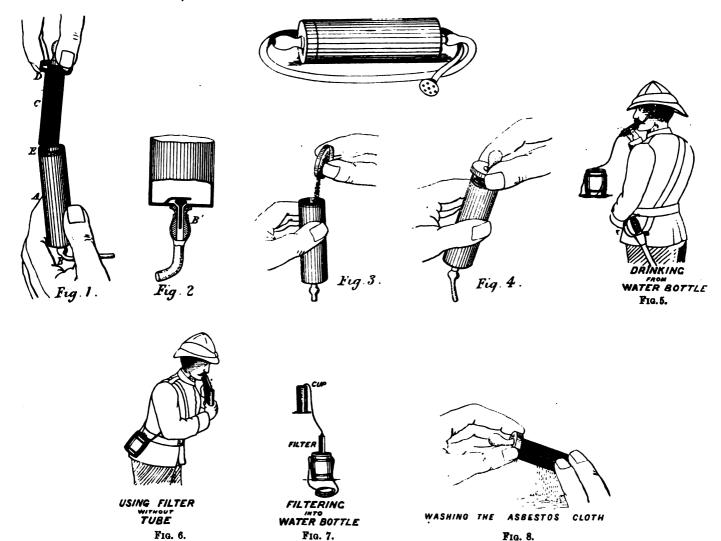
Mr. Burton also gained a medal for the first prize of the American Institute seven years in succession for the best breech-loading military magazine rifle. He also carried off the first prize, a silver medal, at the Boston Mechanics' Institute for the best magazine rifle of the military class.

The Burton rifle appears to be the only military magazine rifle in the Exhibition.





FAUSIMILE OF PRIZE MEDAL AWARDED BY THE AMERICAN INSTITUTE TO THE WARD BURTON RIFLE.



GROUP XXV., STAND No. 1932.—MAIGNEN'S PATENT "SOLDIER'S" "FILTRE RAPIDE."

Description.—In this filter there are only two parts: the filter case A and the filter frame C, Fig. 1. A bag of asbestos cloth is tied on the frame at D with asbestos cord. A washer in the lid makes a water-tight joint. At the bottom of the filter case at B, Fig. 1, is a valve to stop the back flow of the water. This valve is shown in enlarged section at B', Fig. 2. An india-rubber tube is attached to the valve end. The filter is carried in a cylindrical tin box, which may be used as a drinking cup.

How to Prepare the Filter for Use.—Unscrew the filter frame, put three pinches of prepared powdered charcoal into the filter case, as shown in Fig. 3, screw the filter

<sup>1</sup> If the asbestos cloth should become useless from excessive wear or otherwise, it can be removed and another tied in its place.

<sup>2</sup> If the washer were lost or otherwise rendered useless, the joint could be made by winding thread or other fibre round the screw.

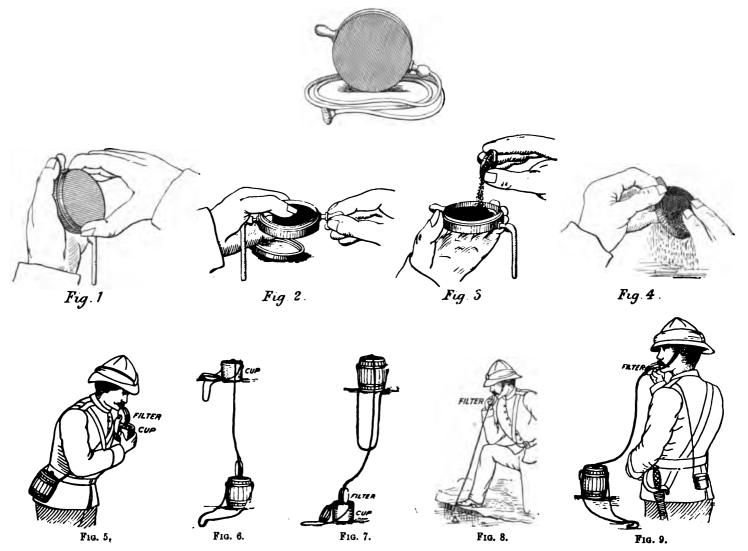
frame in, Fig. 4, and the filter is ready for use. The powdered charcoal is supplied in tins, each holding twenty charges; so that one tin may be served out each week for every twenty filters in general use, or if a whole tin is given to each man, it will last about twenty weeks. One charge is so much charcoal as will fill the lid of the tin without being heaped.

How to Use the Filter.—Place the india-rubber tube in the water, and drink direct from the mouth piece, as shown in Fig. 5. If the india-rubber tube is lost, the filter can be used by dipping the valve end into the water, Fig. 6.— Another way of using this filter is to place the india-rubber tube in the water and syphon it into the water bottle or into any other vessel, Fig. 7.

When and How to Cleanse the Filter.—The filter should be cleansed once a week as follows:—Unscrew the lid, wash off the old charcoal, Fig. 8; put in new charcoal as before; screw the lid on, and the filter is ready for use again.

<sup>3</sup> If the valve should get stuck fast through an accumulation of mud, it can be easily loosened by shaking the filter or by pushing the valve from the bottom.





Description.—This filter consists of a circular case and lid screwing together, Fig. 1 (a washer in the lid makes a water-tight joint),¹ a filter frame covered with asbestos cloth,² and a mouth-piece which screws on the outlet of the filter frame. A washer is fitted on to the screw of the filter frame, next the asbestos cloth, to make a water-tight joint between the filter frame and the filter case; another small washer let in a recess in the mouth-piece makes an air-tight joint between the mouth-piece and the outlet tube of the filter frame. A valve, to stop the back flow of the water, is held in the inlet to the filter,³ and an india-rubber tube is attached to the same inlet. The filter is carried in a tin case, which can be used as a drinking cup.

How to Prepare the Filter for Use.—Unscrew the lid. Put three or four pinches of prepared powdered charcoal

- <sup>1</sup> If the washer were lost or otherwise rendered useless, the joint could be made by winding thread or other fibre round the screws.
- <sup>2</sup> If the asbestos cloth should become useless from excessive wear or otherwise, it can be removed and another tied in its place.
- <sup>2</sup> If the valve should get stuck fast through an accumulation of mud, it can be easily loosened by shaking the filter, or by pushing the valve from the bottom.

on the asbestos cloth, Fig. 3, screw the lid on again, and the filter is ready for use. The charcoal will find its way all over the asbestos cloth when water is drawn from the mouth-piece. The powdered charcoal is supplied in tins, each holding twenty charges; so that one tin may be served out each week for every twenty filters in general use, or if a whole tin is given to each man, it will last about twenty weeks. One charge is so much charcoal as will fill the lid of the tin without being heaped.

How to Use the Filter.—There are five ways of using this filter, as shown by Figs. 5, 6, 7, 8 and 9.

When and How to Clean the Filter.—It should be cleansed once a week, as follows:—Unscrew the lid; unscrew the mouth-piece; remove the frame and wash off the old charcoal. Place the frame in again. Put in new charcoal as before. Screw the lid on again and the filter is ready for use.

<sup>4</sup> This prepared charcoal may be used for other purposes than that of filtering: for instance—in case of diarrhosa or dysentery, a few pinches in a goblet of filtered water will be found to give relief; in case of wounds, bites, or scratches, if surgical aid is not available, this charcoal may be put over the exposed part as an antiseptic; it will stop hemorrhage and prevent inflammation.

### GROUP XXV., STAND No. 1914.

MR. THOMAS TURNER, of 19, Brook Street, London, W., improvement of sporting and military fire-arms, and whose

firm has been established nearly eighty years, shows who has devoted many years to the manufacture and among other exhibits three specialities which are now illustrated. One of these is





The peculiar feature in this gun is its extreme lightness. By means of Thomas Turner's registered butt and a short and light fore-end, the weight of a 12-bore gun can be brought below 6 lbs., while, at the same time, no part of the weapon is weakened in the slightest degree. The action is of the full thickness and strength through the angle of the break-off; the barrels are of full size and strength, 28 inches long, and are less than 2 ozs. lighter than those in ordinary guns of 7 lbs. weight, measuring 30 inches.

The balance of the gun is perfect, and, owing to there

being the full amount of metal in the barrels and action, no unpleasant recoil is experienced with the full charge of 3 drs. and  $1\frac{1}{8}$  oz.

The maximum weights of the various bores are as follows: 12-bore, 6 lbs.; 16-bore,  $5\frac{1}{2}$  lbs.; 20-bore, 5 lbs.

The drawing shows Thomas Turner's registered method of lightening the sides of the butt. It is not at all unpleasing to the eye, and it handles like an ordinary stock.

Another useful invention, particularly to sportsmen going abroad who frequently require to use ball out of their smooth bores, is

# THE ATTACHABLE MUZZLE.



MUZZLE ATTACHED TO BARRELS.



MUZZLE DETACHED.

By means of this invention, a gun can be converted from cylinder to choke, or vice versa, in less than one minute while in the field.

The drawings represent the attachable muzzle and a portion of the barrels, showing the lump, forming part of the under rib, into which the screw of the muzzle works. When the muzzle is attached it is secured by the small screw working into the top rib, which is shown projecting in the drawing.

There is no danger of the muzzle blowing off or becoming loose, as it is attached to the barrels when they are proved, and is stamped with the proof-mark.

The weight of the muzzle is only 2 ozs. and can conveniently be carried in the waistcoat pocket. It can be made with any amount of choke, either both barrels alike or one choked more than the other.

To meet the requirements of many gentlemen who object to use a hammerless gun, Mr. Turner has brought out his





GUN OPEN AND AT FULL COCK.

This gun has all the advantages of a hammerless gun with the additional one of having the hammers outside the lock plates, whereby the firer can ascertain at a glance whether his gun is cocked or not.

The strikers are open to the outside and have no communication with the inside of the locks, making it impossible for any gas escaping from a burst cap to get into them. The heads of the hammers work in grooves formed in the lock plates, and all their edges being rounded off to the plates there are no projections which can possibly catch against anything. When the hammers are down they completely cover and conceal the grooves.

The cocking is effected by the falling of the barrels, by means of a lever engaging with a projection on the steel lump underneath the bite or grip. On the left side of the body, underneath the forepart of the lock plate, is placed a spring, similar in form to the mainspring of a lock. This spring is connected with the cocking lever, and is compressed when the gun is closed. On opening the gun the spring assists the cocking lever to a considerable extent, and so renders the action of cocking remarkably easy, the weight of the barrels being sufficient to effect it. In compressing the spring when closing the gun very little extra power is required; the ordinary top safety bolt is employed, which locks the triggers. The locks being furnished with half bents no complicated arrangement for blocking the tumblers is necessary, as, in the event of accidental jarring off, the sears are bound to catch in the half bents and so prevent the hammers from reaching the strikers. This gun is also made with inside hammers if preferred.

#### GROUP XXV., STAND No. 1934.

# JOSEPH NEEDHAM'S PATENT EJECTOR GUN

is most simple in construction, and so arranged that the exploded case is thrown out for reloading; if one barrel is fired the ejector will throw out the empty cartridge case only; if both cartridges are fired, both are ejected by the

main springs. On opening the gun, each ejector acts quite independently of the other. Mr. Needham's magazine rifle also ejects the empty cartridge case by the main spring; it has one barrel over the other, the upper being the shooting barrel, the lower the magazine. As the empty cartridge is ejected, it is fed from the magazine by



a full one. This magazine holds fourteen or more cartridges according to the length of barrel. Should the magazine not be required, the rifle can be charged from a

pouch or pocket in the ordinary way, the arm being able to be thus used as a single loader.

# GROUP XXIV., STAND No. 1807.—CUTLERY, IRONMONGERY, &c.

LIEUTENANT-COLONEL HARTSHORNE'S Combined Implement comprises 22 tools in one. The whole is made of the best wrought steel.

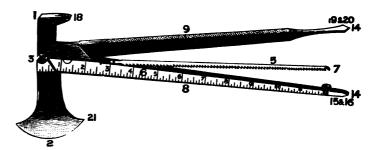
This Combination was invented by Captain Hartshorne, of the Bengal Army, in 1868, and is specially suited to officers on service and in quarters, householders, travellers, and emigrants. Slung from the saddle, it would form a very valuable and useful adjunct to the equipment of the light cavalry soldier. It was highly commended by His Excellency Lord Napier of Magdala, when Commander-inchief of India.

The tool is forged from two pieces of steel only, without any brazing or welding.

This Combined tool comprises:—

1, Hammer; 2, hatchet; 3, wire nippers; 4, screw wrench; 5, the saw opens out at right angles and forms in conjunction with the two legs a T square; 6, 12-inch rule; 7, folding saw; 8, the face of the rule forms a straight edge; 9, rasp for shoeing &c; 10, 11, 12, 13, four files

placed around the sides and edges of the legs; 14, pair of compasses; 15 and 16, screw driver and crowbar, for opening boxes; 17, gas-burner tongs; 18, nail claw; 19



and 20, bradawl and peg for picketing a horse: 21, if this point is buried in wood, the head being kept upright, the whole of the face (3) can be used as an anvil; 22, the weight of the implement is 2½ lbs., and this can be used as a poise for weighing forage, &c.

#### THE FUNCTIONS OF WAR CORRESPONDENTS.

THE position and functions of war correspondents in the field are at all times anomalous and extremely delicate. They require great judgment, excellent tact, and a due regard to caution with respect to their duties in the field, coupled with quickness of observation and rapidity of communication with their employers. It is quite remark-able how few war correspondents evince even moderate judgment in connection with their duties, although they are to a very great extent dependent for the exercise of their functions, upon the military commanders under whom they conduct their duties for the time being. Nearly every war correspondent, as soon as he reaches the seat of war, seems to forget that his true function is to observe the course of military operations and to record and send to his employers merely all that passes within his vision. It is a fact that most of the war correspondents of recent years have totally ignored the true character of their duties, and have misjudged their exact position. In short, they have taken upon themselves both the position and functions of umpire. It may be said, that several have even striven hard to assume the position and functions of general umpire-in-chief in regard to the operations of the commander to whom they have been attached, and to the doings of the officers under his immediate command. In this improper assumption of a false position, they have, with the most dangerous ill-judgment, absolutely misled the public upon matters connected with military movements or events. Their indiscreet action in this particular direction has often led them into positions which have seriously affected the interests of the newspaper in whose employ they have been sent on service, and has brought upon their confrères results of an unfortunate nature.

There has been more than one instance in British campaigns, in which an indiscreet war correspondent, absolutely ignorant of the particular movements of the general officer to whom he has been attached, has telegraphed home observations upon the movements, of a character which have highly excited the public mind, caused it to feel the most serious apprehensions of a great catastrophe to our arms, and entertain grave doubts regarding the capacity of an army's commander, while that very commander has been carrying out a secret and wellplanned operation which has led to a brilliant victory. Exactly the same course of action has been adopted by some British war correspondents with respect to the movements of foreign armies, in whose presence they have been carrying out their duties with the special permission of the several foreign governments concerned. The invariable results to these foolish men, have been their immediate expulsion from the scene of operations, and the accompaniment of a military or some other escort across the frontier, with a firm but polite intimation that future sanction to their presence will never be accorded. The most remarkable part of their performances has then occurred, namely, that they have either stumped the country as lecturers upon the experiences of expelled war correspondents, or they have written in the columns of the daily or monthly press, strongly animadverting upon the military or other conduct of the generals in command. No more dangerous course as an endeavour to effect a judgment upon military events can possibly be allowed to guide any public opinion, since these correspondents' remarks are founded

upon no knowledge whatever as to the particular orders under which generals in command subordinate their movements, or upon any cognisance whatever of the particular objects these generals have in view when carrying out their operations of war. Further, it must be observed that their lectures, or their writings, either in the daily or monthly journals, are highly misleading, since they are frequently the outcome of either expulsion or of some restriction to which the particular writer has been subjected while under military command.

But whether the remarks which a number of these war correspondents think proper to air before the public as soon as any military operations which they have witnessed are ended, or when they are safe at home from the worst results to themselves of injudicious strictures upon the generals with whom they have been on service, are the result of ill-judgment, spite, or deliberate design, there can be no more scandalous proceeding than to accept the kindness or hospitality of general or other officers in the field, and then to hold these officers up to public obloquy or derision in a manner to seriously injure them in public estimation, or to make it appear to the authorities that officers whom they have appointed for their well-tried ability and fitness to command and who have been appointed through these qualifications, are not to be further trusted to maintain the national credit in the

The war correspondent's office has, by virtue of the position assigned to it by the correspondents during the Crimean war, now become a distinct profession which has most unfortunately degenerated into a trade by the acts and deeds of a few misguided men, and out of this trade capital has been made to the fullest extent to which these men have been capable of earning it. It now seems that once a man becomes a war correspondent, he seeks to maintain a reputation in his particular line, and often at the sacrifice of the reputation of a British general. And the correspondent's reputation is endeavoured to be maintained upon no military knowledge or education whatever, as against the life-long training and experience of those upon whom his strictures are made. The whole position and functions of war correspondents, therefore, through their own folly, have got into a false groove and require fresh arrangement.

My attention has recently been drawn to the following, for which the Globe is responsible for reproducing, probably as a satire. The Globe could never have seriously meant its reproduction to be a guide to public opinion. The extract appears to have been taken from an article in the English Illustrated Magazine, generally an excellent periodical. This extract is understood to have been taken from an article entitled "General Lord Wolseley; a Character Sketch ":--

#### "SOLDIERS OF FORTUNE.

"THE key-note to the constitution of that group of devoted adherents who have come to be designated as the 'Wolseley Gang' (remarks Mr. Archibald Forbes in the May number of the English Illustrated Magazine), I take to be its completeness for the functions which it has to perform as a composite whole. In each of its constituent elements, its compounder, if I may use the expression, has discerned some specific attribute, of which, when the occasion calls it into requisition, he shall take

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astute and purposeful avail. As a whole, then, it is totus, teres, atque rotundus, an engine effectively adapted to a wide range of potential uses. The individual units of that whole do not strike one as by any means, one and all, men of exceptional general military ability. Some of them, indeed, may be called dull men. But never a one of them but has his speciality. One has a genius for prompt organisation; another a rare faculty for administration. A third has a winning manner and a good address, a fourth is the scout of scouts. You may wonder what Wolseley can see in so and so, that he has them always with him. Watch events long enough, and time will furnish you with the answer. This man, perhaps of no great account for ordinary purposes, has a strange gift, when there is doubt in regard to some line of action, of defining the right course in a single rugged, trenchant, pithy sentence that carries conviction; him, one may see, Wolseley keeps just to help him to make up his mind. The other man has seemingly no attribute at all, save inertness, a love for gazing at the wine when it is red, and the cultivation of strong language. But he, too, has his gift. Arrange for him a plan of attack, set everything in order, tell him that all is ready, and that he may go to work. Then you can discern for what Wolseley has enrolled him in the gang. He draws his sword, he lets a roar out of him fit to wake the dead; he becomes a veritable god of battle—a lambent thunderbolt of war; he radiates from him the mysterious irresistible magnetism that inspires men to follow him, ay, to use the rough soldier-phrase, "through hell and out at the farther side." The deed done, the conqueror wipes and sheathes his sword, mops his forehead, sighs for a big drink, and is conspicuous no more till he shall be wanted again.'

This repulsive effusion bears upon the remarks now made concerning the arrant nonsense that war correspondents frequently write about the characters or conduct of British generals or other officers as a guide to public opinion, and which effusion, if Lord Wolseley be a man, will cause him the most intense annoyance and disgust, to say nothing of the personal feelings of those officers who must surely come to the conclusion that they are alluded to by innuendo. The sensation which must come over all thorough British officers on reading such stuff as this, will be similar to that which follows upon taking a strong dose of asafætida—that of a loathing nausea. True British officers—and Lord Wolseley is surely one of these—are modest and retiring men, never seeking the relation of their own actions, or desiring to have them forced upon the public. They prefer to obtain a military position solely upon their own personal merits. Some of these officers fail in this course, but they proudly bear the burden of

unrecognised merit.

Let the fulsome adulation and disgusting innuendoes in this precious extract be, to some extent, analysed, and in these what is seen? It would seem, indeed, that the faculty of getting around him men of sterling military qualities is possessed by Lord Wolseley alone. It would indeed be strange if this peculiar faculty were not possessed by other British generals of equal ability in the field to Lord Wolseley. This particular faculty is possessed by Sir Frederick Roberts, Sir Donald Stewart, Sir A. Alison, Sir Michael Biddulph, and many other British generals who could be named.

The adulation shown by the writer's remarks on this part of his subject may be at once dismissed as unworthy

of further observation. But let us take the following. "The other man has seemingly no attributes at all save inertness, a love for gazing at the wine when it is red, and the cultivation of strong language. Arrange for him a plan of attack, set everything in order, tell him all is ready and that he may go to work. Then you can discern for what Wolseley has enrolled him in the gang. (The Wolseley gang is alluded to). He draws his sword, he lets a roar out of him fit to wake the dead; he becomes a veritable god of battle—a lambent thunderbolt of war; he radiates from him the mysterious irresistible magnetism that inspires men to follow living, ay, to use the rough soldier's phrase 'through hell and out at the farthest side.' The deed done, the conqueror wipes and sheathes his sword, mops his forehead, sighs for a big drink, and is conspicuous no more until he shall be wanted again."

And it has come to this in these our days, that the war correspondent is to write such nauseous rubbish as this with reference to British generals. Who is alluded to here? How does the gallant officer feel, who must imagine the innuendoes are intended for him by implication? Does he feel pleased at the innuendo that he is by implication a drunkard, and swears right and left at his officers and soldiers? Does he feel gratified that the writer follows up the innuendo by a clincher on the subject of his being a wine-bibber, namely, the sigh for a big drink, and not of aqua pura? This British general possesses a marvellous power of radiation, he mops his forehead, he wipes and sheathes his sword (supposed to be covered with blood from hilt to point of course), before he sighs for his big drink-how big, it may be asked? The writer should have said, because some men, given to constantly regarding the wine when it is red, have particular views as to the quantity which constitutes "a big drink." But enough of this sickening matter, which only goes, as before remarked, to show to what extent the profession of a war correspondent is now degraded.

The desire to keep themselves before the public after their work in the field is done, is at the bottom of much of the mischief that has brought about the preparation of more stringent measures regarding war correspondents in the field. They have no one to blame but themselves if these measures seem harsh. If they would but have the sense to confine themselves to a relation of all that passes before them, and no more—and this is their true function—and refrain from taking upon themselves the quasi-military position of umpire-in-chief, and as such, write remarks for the public which only show the grossest ignorance to "those who know,"—remarks, as has been said, which are founded upon no military or technical knowledge or training whatever, they would do well, be always well received by commanding officers, and yet

maintain a good reputation.

It is to be sincerely hoped that war correspondents who in future write strictures upon the military movements of the generals to whom they are attached, shall never again be allowed to accompany a British Force when on active service against our enemies.

THE portrait of Brigadier-General H. Brackenbury, inserted in our last month's magazine, was drawn from a photo of the gallant officer, by Fradelle & Co., of 246, Regent Street.

## REVIEWS OF BOOKS SUITABLE FOR NAVAL AND MILITARY LIBRARIES.

A Short History of the Naval and Military Operations in Egypt from 1798 to 1802. By Lieut.-Colonel Sir JOHN M. BURGOYNE, Bart. (Sampson Low, Marston, Searle, and Rivington.)

This is a very well-drawn-up epitome of the campaign in Egypt from 1798 to 1802. The battle of the Nile is fully described, and the stirring incidents in connection with it are well brought out. That Nelson anticipated it would be a glorious engagement, may be inferred from the remark he made to the principal officers of the Vanguard, whom he invited to dine with him: "Gentlemen, by this time tomorrow I shall have gained a peerage or Westminster As another instance of Colonel Burgoyne's Abbey." ability to marshal forth facts, and give the true martial colouring to military incidents which have sustained the prestige of the British army, we would refer the reader to Chapter VI.: "The Battle of Alexandria—Death of Sir Ralph Abercromby." "It was in this battle," writes the author, "that the 28th so distinguished themselves when attacked in front and rear. With the utmost coolness the rear rank turned about, and poured volley after volley into their assailants, and for some time maintained this extraordinary mode of fighting. To commemorate this, the old 28th were always allowed to wear their number both in front and rear of their head-dress; but alas! recent changes have removed all pride which regiments used to take in their hard-earned distinctions." What the result of the battle of Alexandria was to the French may be inferred from Bonaparte's remark to Marshal Junot, "Junot, we have lost Egypt. My projects alike with my dreams have been destroyed by England." We much regret being compelled to curtail our remarks on this book. which shows Colonel Burgoyne not only to be a military student of a very high order, but possessing those qualifications which make the military historian and biographer.

The old remark, how often history repeats itself, has never met with a more remarkable illustration than in the present Egyptian campaign. The author says, "We have heard a good deal lately of the wonderful originality of troops embarking in whale boats, of mounted infantry, of cavalry mounted on camels, of the movements of troops in the desert in large squares, with cavalry in the intervals, and guns in the angles, but the preceding pages show very plainly that all that has been done lately with much flourish of trumpets, was performed quite as successfully with one-eighth part of the means a little over eighty years ago." Colonel Burgoyne has succeeded in the task he attempted in that he has written a very instructive and entertaining book that will attract a large class of readers.

Harrow School and its Surroundings. By PERCY M. THORNTON. (W. H. Allen & Co., Waterloo Place, S.W.)

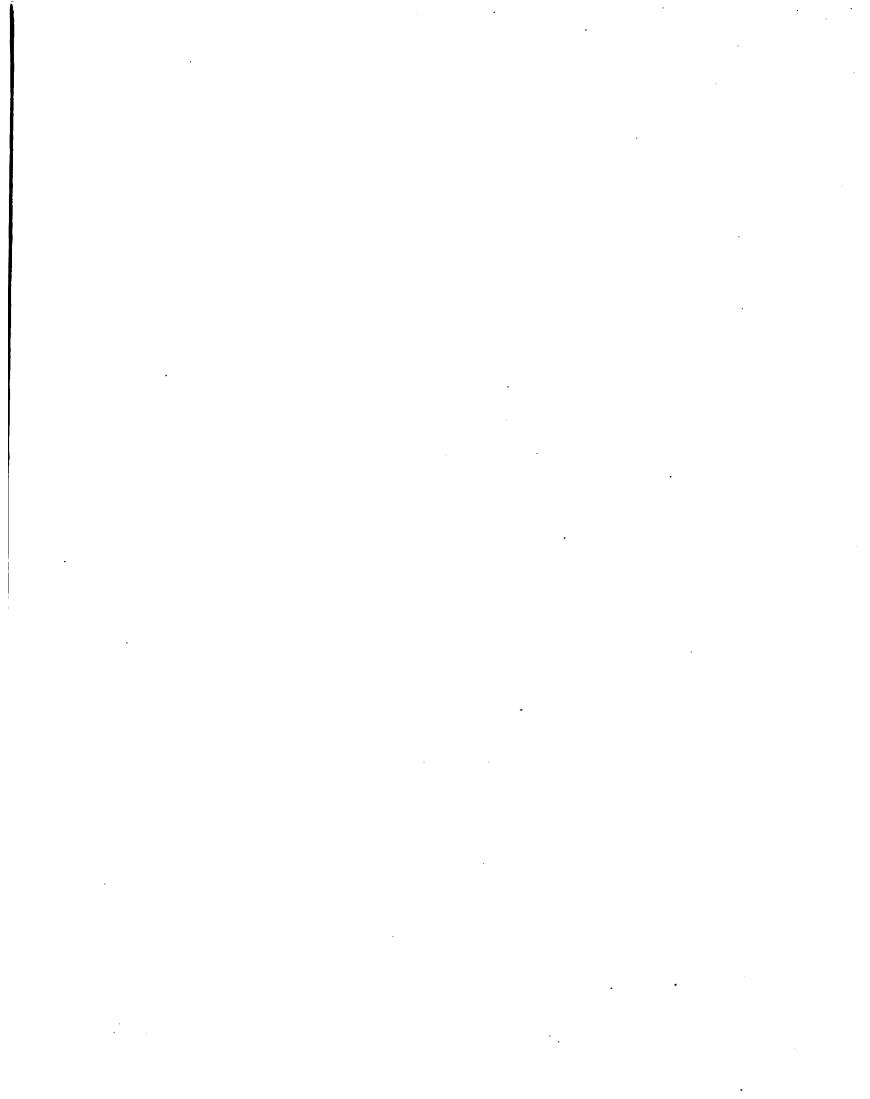
To old Harrovians this book cannot fail to prove otherwise than interesting. The traditions of a public school are always cherished by the boys and handed down from one generation to another. A school possessing such

"surroundings" as Harrow, is, however, deserving of some more substantial record, hence we feel sure that this book will be heartily welcomed by those who have been educated at "Harrow-on-the-Hill." The accounts given of the eminent head-masters who have governed there are full and interesting, and interspersed with many anecdotes of distinguished Harrovians. A great public school like Harrow has of course greatly identified itself with cricket. In this book there will be found an excellent account of all their celebrated cricketers and their doings. The account of Lord Palmerston—who for so many years identified himself with Harrow, and who at eighty, as Mr. Ashley tells us, was in the habit of riding from Cambridge House, Piccadilly, to Harrow town within the hour—is scarcely as full or characteristic as we had anticipated. The book concludes with a very graceful allusion to the late Colonel F. Burnaby, of whom the writer says, "Some day, when, in addition to the Crimean aisle of the school chapel, another memorial is erected to Harrovians who died for their country, the name of Fred Burnaby will not be forgotten. Like Melvill, who fell protecting the colours after Islandwana, and Viscount St. Vincent, slain in the Soudan, his memory will remain ever fresh on the hill."

How to Clean and Preserve the Martini-Henry Rifle.

By the Editor, Illustrated Naval and Military Magazine. Directions for the Volunteers. With sectional drawings of the action and drawings of every component part of the rifle, with references, diagrams of trajectories, and useful tabulated statements relating to European and other army rifles. Published at The Pictorial World office, 149 Strand, W.C. Price Sixpence.

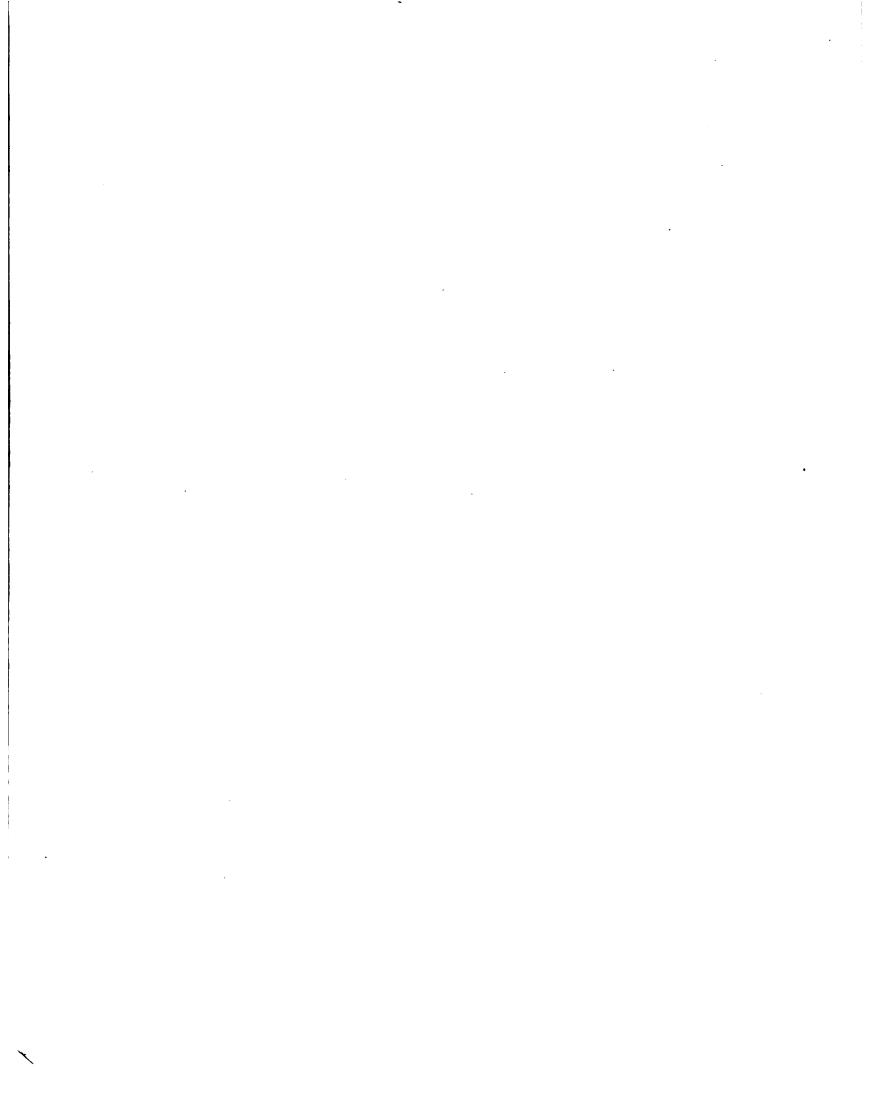
GOVERNMENT having at last armed the Volunteers with the same weapon as the soldiers of the line, no more appropos publication could have appeared. As is well known in every regiment there are armourer sergeants, so that a soldier can soon have set to rights anything that may happen to be wrong with his Martini-Henry rifle. Not so with the volunteers. The instructor of musketry in every volunteer corps is supposed to teach the men how to clean and preserve the rifle, but, however capable and zealous the instructor might be, no efforts on his part could possibly enable him to give the time and attention necessary to instruct the whole corps on this point. Again, it must be remembered, that the volunteer has the sole charge of his rifle, takes it home with him, and attends shooting matches here and there. It must be obvious, therefore, to all volunteers, that the publication of this unpretentious brochure is not only timely, but cannot prove otherwise than extremely useful to the volunteers. The author has been so long regarded as a high authority on small arms generally, and especially as regards the Martini-Henry rifle, that it is needless to say more of the pamphlet than that the directions given for the cleaning and preservation of this important arm are clear and to the point, and volunteers will find it a very handy vade-mecum.



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